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REQUIRED READING FOR DECEMBER.

HOW TO LIVE.

BY EDWARD EVERETT HALE.

HOW TO EXERCISE.

It is quite worth while to read carefully the theories of the best Greek authors about education, and, of our own race, to go as far back as Lord Bacon and Milton and Locke, to see what they say about it. For such reading saves us from the delusion of our own time, which confounds education with book learning, and almost takes it for granted that a man who has read a great deal, is well educated. Now, any Greek who thought at all, had a thorough respect for the body, if it was only as the physical tool which was to carry into effect the conclusions of the mind, and the demands of the soul. Paul went farther. He recognized the divinity of man's nature. He knew that, as James said, man could be a partaker of the divine nature. Paul squarely claims, therefore, that the body must be kept pure and holy, because it is the temple of the indwelling God. All this runs quite counter to the happy-go-lucky theory largely prevalent in our time, which supposes that if you have a doctor to cure the visible diseases of the body, the body may be left to take care mainly of itself. The average public school of America teaches reading, writing, and arithmetic, with, perhaps, a smattering of language, a smattering of physical science, and, possibly, of the higher mathematics. But, as to any exercises which are to make the eye more sure, the hand more quick, the arm more strong, or the man more enduring, the average public school knows nothing of them. It sends the boys or girls out to recess. Perhaps an intelligent teacher airs the room, and that is all. The recent "craze," as I may call it, in the matter of athletics is a help in this matter, but it has its dangers also.

Indeed, every specialist is apt to think that he must make every pupil such another as he is himself. A music master will tell you you must practice the scales six hours a day. The chief of a gymnasium, who can lift two thousand pounds himself, wants his pupil to lift two thousand pounds. The president of an athletic club is eager to have some one "beat the records" in running or walking or leaping. Every one thus exaggerates his own specialty, forgetting that the whole business of education is to make a perfect man, well-balanced, rounded if you please, and ready to do whatever duty comes next his hand. When Starr King was in the prime of his youth, not long before his death, Dr. Winship was showing how men

could be trained to lift enormous weights. "He does not understand what I need," said King. "I have no occasion to lift half a ton, but I should like to go 2.40." "Two-forty" was then the standard for fast trotting, and King meant that he wanted to do promptly and well, in the best way, what he had to do. Here, in an epigram, is the statement of what one's "exercises" are for. They are the use of a part of every day, so that when duty comes, one may be ready for duty. And a man will not be ready for duty unless he has exercised in such fashion as shall make him ready. Young people read novels, and they fancy that when the time comes, they will do as well as Harry or Jane does in the story. When you are presented of a sudden to Mr. Gladstone, you expect to answer his questions as readily as Harry did when he had that charming talk in the book with the Lord Chancellor. It will not come out so. Amadis¹ stood three days on the bridge holding it against all comers. But he could not have done this, if he had not trained himself every day in all the exercises of knight-hood.

There may be bodily exercises; there are exercises of memory, imagination, and other forms, which we rate as simply mental; and there are spiritual exercises beside. Of these, I give this paper to some hints on bodily exercise, and when I write "How to Exercise" at the top, I do so, because in the ordinary language, exercise has come to be spoken of as if it related principally to the body. In derivation and in original use, exercise implies the experience which one gains in the repetition of any action.

1. People ask at once how much time should be given to this series of exercises or to that; how much to study, how much to memory, how much to walking or to riding? I shall answer this question from no ideal standard of what one would like, or of what they do or do not do in Paradise, in Utopia,² or in Sybaris,³ but with simple reference to what can be done in the ordinary life of this country.

For there exists among us, quite low down and fundamental in our arrangements, the necessity of earning our living, and, whatever a man wants to, or does not, and whatever John Milton or Pestalozzi⁴ or De Gérando⁵ says he had better do or not, the probability is as nine to one, that he has to go to the mill or the store or the shop or the field every day, and

work at some work or other in "subduing the world." The probability is that he must do this eight or ten hours each day, and he may have to give more hours. I hope not. I hope, indeed, that we shall come round to the average of an eight hour system by and bye for the work which a man does in his craft, trade, or profession, so that he may feel at ease, with a good conscience, to give some of his waking hours to some "exercises," which will train his body, mind, and soul, beyond and outside the exercise which they gain in his daily calling.

I give such advice as is to be found in this paper, remembering this restriction. I have already said a man must do the duty that comes next his hand. Now that duty may be the keeping a set of books. It may be the watching a shuttle as it flies backward and forward in a loom. It may be sitting in a chair all day, and purifying mercury. For the exercise of his body, such a man must take time outside this daily requisition; for some exercises of his mind, he must take such time; and for some exercises of his soul.

I am apt then to advise people who ask my advice in such things, to limit their resolutions about them at the first, to the control of three hours a day, outside those which are given to what may be called the daily vocation. If a man's daily vocation keeps him in the open air, exercising his muscles, his nerves,—or in general his body,—the three hours need not be given to physical exercise. If on the other hand, they are given to indoor work, as in the cases described, he will need to give most of his three hours to physical exercise. He must give a fair share if he means to be a perfect man. He must have his body up to a working standard. He does not gain that by resolving. And he has no right to expect any answer to his prayers, unless he fulfils the part God requires of him.

"Two men are in a canoe in the Mozambique Channel. A sudden flaw of wind upsets the boat. Before they can right her, she fills with water, and sinks; and the two men are swimming for their lives. 'Ah, well!' says one of them to the other, 'it is a long pull to the shore; but the water is warm and we are strong. We will hold by each other, and all will go well.' 'No,' says his friend, 'I have lost my breath already; each wave that strikes us knocks it from my body. If you reach the shore,—and God grant you may!—tell my wife I remembered her as I died. Good bye! God bless you!'—and he is gone. There is nothing his companion can do for him. For himself, all he can do is to swim, and then float, and rest himself, and breathe; to swim again, and then float, and rest again,—hour after hour, to swim and float, swim and float, with that steady, calm determination that he will go home; that no blinding spray shall stifle him, and no despair weaken him; hour after hour, till at last the palm trees show distinct upon the shore, and then the tall reeds, and then the figures of animals;—will one never feel bottom?' Yes, at last his foot touches the coral, and with that touch he is safe.

That story that man told me. I copy it here because it shows, in a good concrete case, what exercise had done for one man, which it had not done for the other. Both of them, for all I know, had strength, bravery, and prudence; but one of them had exercised his body in the essential exercise of swimming, and the other had not. When the test came, one knew how to live, and the other went under.

I certainly do not expect to give much advice in detail in regard to the several exercises of the body which a boy or a girl, a man or a woman, would do well to keep up, daily, weekly, yearly. Lives differ so much that the advice for one man would be quite different from that for another.

The directions for most women,—as we live, would be different from that for most men. But there may be stated a few things which are central, or fundamental:—

1. To live well, you must be in the open air every day. This rule is well nigh absolute. Women offend against it terribly in America. And women are very apt to break down.

Rain or shine, mud or dust, go out of your house, and see what God is doing outside. I do not count that an irrelevant phrase, which says one feels nearer God under the open sky, than he is apt to do when shut up in a room. I know a very wise man who used to say: "People speak of going out, when they should speak of going in." He meant that you do plunge into the air, as when you bathe at the sea-side, you "go into" the water. Be quite sure of your air-bath. I will not dictate the time; but, on the average, an hour is not too long. You will fare all the better, will eat the better, digest the better, and sleep the better, if instead of an hour it is two hours or more.

A good many other things go with this. Form the habit, if you have regular reading to do, of reading in the open air. Find a nook in some corner of the house,—on the outside of the house,—or between two great rocks, where you can sit in the sunshine, even in late autumn or in the winter, and read your Chautauqua lesson under the open sky. Very likely you will find at first a certain strain on your eyes. You must, of course, be careful about this. But ask yourself whether your eyes were made only for rooms lighted by one or two windows, and whether they ought not to be exercised up to the standard of full daylight.

2. Those people who are fortunate enough to read their papers on the western side of the Alleghenies, will, in most instances, be fortunate enough to have each a horse at command. Such is one of the every-day luxuries of those states which rule America, and one of the reasons why they rule America is that their people are tempted to live so much in the open air. If you are so fortunate, there is, I suppose, no exercise better for health than horseback riding, whether for man or for woman. The rest of us, excepting the few who have bicycles at command, have to walk as we take our air-bath.

Walking does not, of itself, exercise all the muscles. Running is much more approved by the authorities. I happen to know that Helmholtz,⁶ the great German physicist, recommends daily running as the best treatment, where there is any tendency to congestion of blood on the brain. Military drill has immense advantages. This nation has gained a great deal in the superior carriage of its men since the war. I could wish that the teachers of girls' schools would do something for their pupils which approaches it.

Sweeping a floor is admirable exercise, and you know Herbert⁷ says:

"Who sweeps a room as for thy laws,
Makes that and the action fine."

3. No exercise, perhaps, can be compared to swimming; but, of course, in our climate we can enjoy it only a few months in the year. All women should learn to swim, as well as all men. It is really unfair to their brothers or their husbands if they do not.

4. Another set of questions will come up which different people will answer in different ways. I have simply to remind my readers that they must be answered in some way. For instance, a man or woman must be in good training for walking. If the man be a postman, the government will expect him to walk twenty miles a day. If he be a light-infantry-man, he must be able to walk fifteen miles a day, and to carry a knapsack, cartridge-box, and musket. Now, what is the requisition for a gentleman or lady in ordinary life, who is not a postman or a light-infantry-man?

The answer would be different in England from what it is here. Their climate on the whole permits of walking more than ours, and they are on the whole trained for longer walks than we are. Here, I should say, that every man ought to be able to walk six miles a day without any sense of extra exertion or fatigue—I know no reason why a woman should not. Indeed, I think it would be much better for the women of this country if they were all trained to this standard. As these pages pass the press, I see that President Eliot tells the freshmen of Harvard University that they ought to be able to walk

ten miles a day on the average as a matter of course. In the same address, he says that a man should be able to hoe potatoes for three hours without any sense of fatigue.

5. But it must be understood in all such suggestions that we are not urging you to use up your strength on exercise. I am not speaking as if exercise were your business, I am only speaking of preparation for your business. If your business is study, keeping store, taking care of children, making boxes, shoeing horses, you are to use your vital force, your strength for those duties. You are not, under the pretence of exercise, to unfit yourself for the duties of the day. I once knew a club of young enthusiasts, men and women, who used to walk before breakfast summer mornings. It is an exquisite time of day, and they had what the New England dialect calls "beautiful times." But when they came back after two or three hours, and ate a sumptuous breakfast, as they used to, they found themselves quite unfit for the duties of the day, for making clothes, writing sermons, advising clients, or painting pictures. This is what in slang phrase is called "running exercise into the ground." Such exercise is no longer preparation for living. Remember all along, that our business is to keep the body up to the highest point, that we may get from it all the work we can.

6. And remember in the arrangement of your physical exercises, another series of them which does not come at all under the head of athletics. I wish I could give more room to speaking of them than I can, but I must at least name them. People are apt to call them "accomplishments." But, as people live in civilized society, some of these are as necessary as, in the Mid-

dle Ages, swimming or fencing or riding were to a gentleman.

One of them is writing. Writing is learned and is kept up by physical exercise. Every man and every woman ought to write well. That is, they ought to write quickly, in a handsome hand which is easily read. And every man and woman can do this by proper exercise of the hand and arm, with or without a teacher. I have known people who wrote execrably, reform entirely in a fortnight's time by working faithfully, as you may work on the copies of a writing book which may be bought for ten cents.

Every one who can learn to write can learn to draw. In fact writing is rather a difficult sub-department of drawing. I think every one should train himself to draw accurately, so far as to be able to represent in proper proportions what he sees. If a man wants a book-case made by a carpenter, he ought to be able to make a correct drawing of it for the workman, which shall not look as if it was tumbling over to the right. The reason, by the way, that the drawings of unskilled people always slant to the right is, that they learn to write before they draw.

Exercise in music is another of these accomplishments. Here the test is, do you like it? If you like it, you ought to keep it up so far as to give pleasure to yourself, or to give pleasure to your friends. For here is one more capacity of the body, and you have no right to let that capacity die out. Remember what the body is, what it is for, and who is its master.

Indeed, if in these three essentials, you will carefully keep a fit reverence for the body, you will be able, better than I can, to adjust for yourself the physical exercises of your life.

ELECTRICITY—A HOME STUDY.

WITH SOME ACCOUNT OF ITS PAST AND SUGGESTIONS AS TO ITS FUTURE.

BY CHARLES BARNARD.

CHAPTER III.

In the October and November numbers of THE CHAUTAUQUAN, directions were given for performing a number of interesting experiments in electricity. It is understood that you have by this time performed all these experiments. If you have done so, the new experiments we shall now try, though much more complicated, will be easily understood, because they are directly based on what we have done before. Our experiments have already demonstrated that electricity may be excited by the friction of silk upon glass, or flannel upon sealing wax. We have also observed that electricity is conducted by copper, and that it cannot be conducted by silk. Refer again to your list of conductors and non-conductors, as we shall again need both. We have also demonstrated that the positive electricity from glass attracts the negative electricity of wax, and *vice versa*. Our experiments have shown as the law of attractions and repulsions—*like repels, unlike attracts*. Commit this law to memory for we must now use it as a key to new laws.

Get the small feather and fine silk thread we used in November, and suspend the feather by the thread from a glass lamp or other piece of furniture over the table and in easy reach. It will be found here that a pith ball, such as is included in the Chautauqua Electrical Kits, is better than the feather. However, if you have no kit, use the feather. Have the board laid on the table, and warm the glass tube and the sealing wax and the two pads. Rub the glass briskly, and bring it near the feather or pith ball. The feather flies to the glass, touches it, and is then repelled. The feather is now charged with positive electricity. It is said to be *polarized*. Rub the glass again without delay, and then, spreading the silk pad open, bring it near the feather. The feather flies to the

pad. It is plainly attracted. If you fail, repeat the whole experiment, first *polarizing* the feather from the glass, till you see this attraction of the feather to the pad. We apply our law of attraction. If the positive feather is attracted, the pad must be negative. Use your imagination always in these experiments. Try to imagine the conditions of things. The feather, you see, is positive. It was polarized by the glass. It flies to the pad. There is only one conclusion. The pad must be negative. Discharge the feather by holding it in the hand for a moment, and then repeat this whole experiment, using the wax and the flannel pad. This experiment confirms the other, and the flannel pad is proved to be positive. Clearly here is something new. Friction excites electricity, and the electricity found in the two things rubbed together is of opposite polarity. If one is positive, the other is negative. The whole subject is becoming more curious than ever. We are evidently close to a new aspect of the matter.

What is electricity? Is it anything that can be torn apart by friction? We certainly have friction, and, as a result, positive electricity and negative electricity. In one case the positive is on the glass, in the other, the negative is on the wax. The silk pad is negative, the flannel is positive. What is this singular thing that behaves in such a peculiar manner? This question has been a puzzle for a long time. We may ask what is water, and get a good answer quickly enough. No one is yet able to give as good an answer to the question before us. We can only say it is a result or manifestation of force. We use force and get friction and attractions and repulsions, but this does not tell us what electricity may be. Benjamin Franklin tried to give a reasonable explanation of what we have just seen. He imagined that everything contained a curious, invisible fluid, and that

when there was too much of this fluid present in anything, it displayed positive electricity; when it had too little, it exhibited negative electricity. This seemed a good notion, because by friction the regular supply of the fluid was upset, and too much or too little appeared. Another investigator, Symmer, imagined that there might be two invisible fluids, and that when both were present, nothing happened, and no electricity could be found. By friction they could be pulled apart. When drawn apart, they attracted each other and pulled light bodies after them, as we have seen in our experiments. If two bodies held a fluid of the same kind, they repelled each other. This we have also seen.

The question is not settled. Nobody knows whether there are such fluids. It is quite possible they do not exist at all. All we know is that this notion, whether true or not, explains our experiments. We accept the idea because it is convenient and helps us in our work. We call it a working notion, and we shall use it as an imaginary tool in our future experiments. Many people have thought that imagination was something to be regarded with mild disapproval as just a little vain and foolish. For such work as this, the Creator has given us in a vivid imagination one of the best mental tools we can use, and the wise student takes pains to cultivate it.

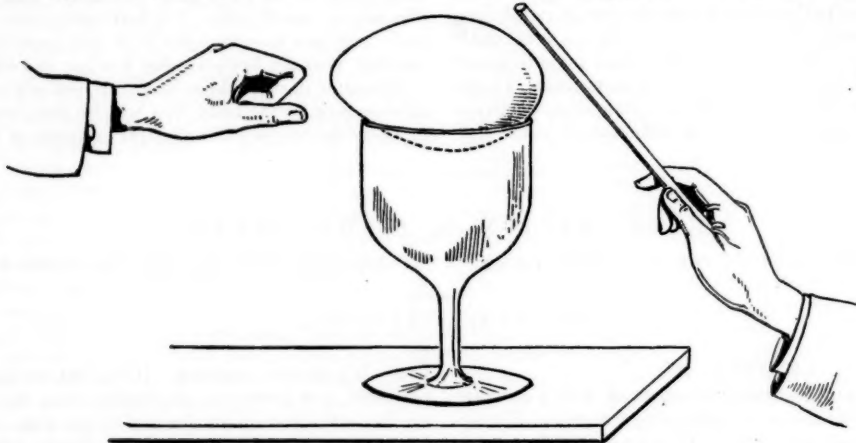


FIGURE I.

Balance a stick or ruler on a goblet or egg-glass, and place it on the table with the end of the ruler about an inch from the suspended feather. Rub the glass tube, and hold it over the stick without touching it. The feather is attracted to the ruler, touches it, and is repelled. Is this conduction? It certainly looks like it. Take away the tube, and the electrical effects in the ruler completely disappear. Plainly it is not conduction. Repeat the experiment several times. Each time the electricity which is apparently in the ruler, disappears when the tube is taken away. Touch the tube to the ruler, and we shall have conduction. The feather is violently driven away from the ruler, and the effect even remains in the ruler after the tube is withdrawn. When brought near without touching, the ruler loses its electrical effects over the feather as soon as the tube is removed. This peculiar behavior of electricity is wholly different from anything we have seen before. The electricity in the ruler is said to be *induced*. It is called electricity by *induction*.

Put an egg on its side in a small wine-glass, get the electroscope, and place these on the table near the suspended feather. Rub the glass tube, and hold it near one end of the egg. Observe that the egg is insulated, and whatever electricity is in it cannot escape. (Note. The egg, glass, and tube should be warm and dry.) Now, on the notion of the two fluids, what happened to the egg when the rubbed tube was brought near it? It held electricity in equal proportions, positive and negative. When the positive tube comes near it, all the negative

flies to meet it, and all the positive tries to get away from it. The two fluids are separated, and, as they cannot get out of the egg, they have gathered one at one end of the egg, and the other at the opposite end. Take the tube away and, lifting the wine-glass, bring the egg near the feather and the electroscope. Not a trace of electricity can be found in the egg. Repeat the experiment; while the tube is still held close to the egg, bring the electroscope near the egg. Instantly it shows the egg is well charged with electricity. Take the tube away, and it is gone. It is easy to imagine just what happened. The two fluids by induction were pulled apart. When the tube was removed, they flowed together again. We imagined they collected at the ends of the egg when the tube was near. Can we prove this? Induce the electricity again, and, while the tube is held close to the egg, bring the knuckle close to the opposite end of the egg. Touch it quickly and gently, and then take the tube away. Test the egg now with the electroscope. It is highly electrical. Figure I shows how the experiment is performed.

One more step and we shall solve the puzzle. Discharge the egg, the electroscope, and the feather by touching them, and begin the experiment by bringing the rubbed tube near the feather till it is polarized or made positive, and is repelled.

Now quickly rub the tube, and bring it near the egg, touch the opposite end as before, and then take away the tube. Lift the egg by the glass and bring it near the positive feather. The feather flies to meet it. Unlike attracts—the egg is negative. Try to imagine all that happened. By induction the negative electricity in the egg was drawn to one end, and the positive was repelled to the other end. A touch of the finger allowed it to escape and leave the negative alone in the egg. When the tube was removed, the negative flowed all over the egg and covered it completely. Discharge everything, repeat the whole experiment with the sealing wax, and prove the work. Our experiment with the ruler was just like this experiment.

Get another egg, and place it in a wine-glass close beside the first, with the two ends touching.

Rub the glass tube, and place it near one egg as in Figure II. Now while the tube is in that position, gently draw the second wine-glass away to separate the eggs, and remove the tube. Try to imagine what has happened now. The two eggs touched each other, and practically made one. The negative electricity of both gathered near the tube. The positive of both gathered at the distant end of the second egg. By drawing them apart we collected the positive in one egg, and the negative in the other. See that all is discharged, and begin again, first polarizing the feather. Hold the egg pulled away near the feather, and observe what happens. Try the other egg with the feather. In this way, prove beyond dispute that all we imagined actually happened. Repeat the whole

experiment with the sealing wax, and prove which egg is positive and which is negative. Depend wholly on yourself. Settle everything by actual trials repeated, at least, twice, and put down the results in your note book for future reference. You will find it well to make notes of all experiments.

and with it we can perform nearly all the experiments we have already tried, beside many others even more curious and entertaining.

Warm the *electrophorus* gently (not too hot), and then rub the vulcanite hard with the flannel pad. Lay the plate upon

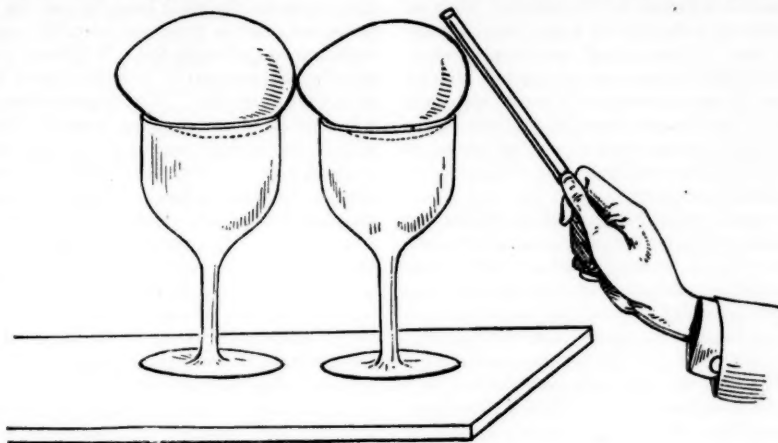


FIGURE II.

Having obtained a clear idea of this singular matter of electrical induction, we can go on to other and even more interesting experiments. Get a circular piece of thin vulcanite! about six inches in diameter, and fasten it to a round piece of dry wood with small tacks. Get also a circular piece of tinplate about four inches in diameter. Heat the center of this plate over a lamp, and when quite hot press the end of a piece

it, lifting it always by the insulated handle. Lift it off and test it by the feather and the electroscope. No effects. It is clearly neutral or non-electrical. Put it back on the vulcanite, and while it rests there, touch it quickly and gently with the finger. Now lift it and test it for electricity. It is highly electrical. Put it back on the vulcanite and touch it as before. It is again strongly charged with electricity. In the *electrophorus*

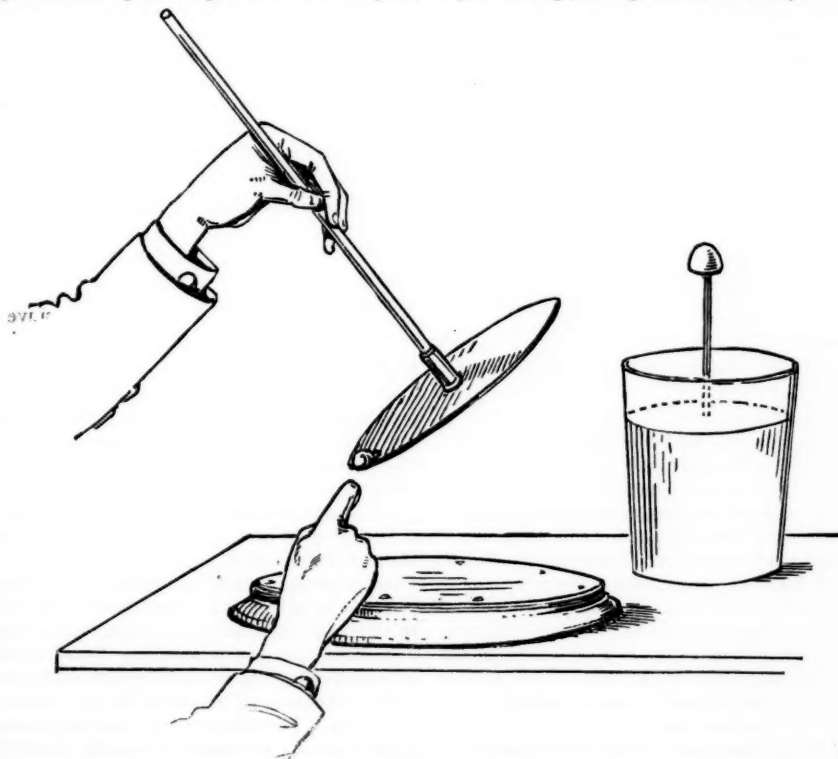


FIGURE III.

of sealing wax against the plate. It will melt, stick fast, and, when cold, form an insulated handle, as shown in Figure III. It will also be an improvement to fasten a round brass button or round bit of metal to the edge of the plate with a drop of sealing wax. This apparatus is called an *electrophorus*,

we have a practical electrical machine, for we can lay the plate on the vulcanite, touch it, and lift it off well charged with electricity for twenty or thirty times after once rubbing with the flannel pad.

Try to imagine what happens in this apparatus. It is plainly

induction. On rubbing the vulcanite it is polarized and made negative. On laying the plate upon it the positive electricity of the plate is attracted to the under side, and is said to be *bound*. The negative is repelled and collects on the upper side, and is free to escape to the finger as soon as the plate is touched. For this reason it is called *free* electricity. Then on lifting the plate it is covered with positive electricity. Charge the feather with the tube as before, and repeat this experiment. Hold the plate to the feather. It is repelled, and the experiment proves that all we imagined took place, really did take place. The plate can therefore be used in place of the glass tube in all our past experiments at a great saving of labor, because when once rubbed the vulcanite will act by induction on the plate many times over.

Take the *electrophorus* to a dark room, rub it briskly, put on the plate, touch it, then lift it by the handle, and bring the knuckle near the button on the plate. There is a slight snap or cracking noise, and a tiny spark flies between the plate and hand leaving a stinging sensation. Repeat this as many times as you wish, because it shows us wholly new phenomena. Electricity here manifests itself as light, as sound, and as a physical sensation. We can now see, hear, and feel it. Here is clearly something different from the attraction or the repulsion, the polarity, conduction, or non-conduction, or the induction we demonstrated by our experiments. The whole matter increases in interest, and we want to go on, to learn and see more. To help us in the work we now need something to enable us to keep electricity when we get it.

In Figure III, is shown one more apparatus easily made at home. Select a smooth glass tumbler, getting the best quality of glass. Then line the inside with tin foil up to within a third of the top. Cover the outside in the same way, fastening the foil on with flour paste. Take a piece of copper or brass wire, and fasten it upright in the bottom of the tumbler with sealing wax, taking pains to see that the wire touches the foil. At the top of the wire fasten a round metal button as in Figure III. You recognize this, perhaps, as a Leyden jar. Rub the *electrophorus*, touch, and then lift the plate and bring it to the knob of the jar. A spark flies to it with a slight snap. Do this ten or twenty times in succession. Now hold the tumbler in one hand, touching the foil on the outside. Then touch the

knob at the top of the wire with the other hand. The effect is surprising and peculiar. Let us try to imagine what happened in the tumbler. On bringing the plate near the knob on the wire, the positive electricity of the plate being now free, flew to the tin foil inside the tumbler, being conducted down the wire. Each time the plate was brought near the knob the same thing happened, and in time considerable positive electricity was collected on the inside foil. What was happening on the outside foil during this? Induction must be at work across the glass of the tumbler. The negative electricity on the outside foil is attracted and becomes bound. The positive is repelled and, if the tumbler stands on any conductor, (a good plan is to stand it on a wire or other piece of metal that reaches a gas lamp or the floor) is free to escape into anything near, leaving the negative behind. Now we have positive inside and negative outside. We offer then a conductor by holding the tumbler in one hand and touching the knob with the other, and we feel a startling shock as they flow together through our body. They are of opposite polarity—unlike attracts—and we are pretty well aware of the vigor with which they rush together through our tingling fingers.

Such a glass or bottle covered with foil is called a *condenser*, or *Leyden-jar*. This remarkable apparatus was first described by Kleist, of Cammin, in Pomerania, in 1745. A year later Cunaus,² of Leyden, also discovered how to make one, and thus it got the name of *Leyden-jar*. Its discovery caused the greatest wonder and even fright. Musschenbroek,³ the savant, (1692-1761), felt a shock from a jar and declared nothing would ever tempt him to try it again. Bore, another savant, (1723-1788), declared he would willingly die of the shock, so great did he regard the doubtful honor of being killed by such a wonderful and awful machine. Dr. Watson⁴ and Dr. Bevis both improved it, and Franklin made it the subject of some researches and discoveries that were, at the time, thought to be very wonderful. Tyndall, of London, (born 1820), invented some of the experiments we have tried, and greatly aided all students of this great science, who, like ourselves, wish to understand this complicated matter of induction. Next month we will examine even more curious and interesting matters and go on to laws of electricity.

NOTE.—The *electrophorus* provided in the Chautauqua Electrical Kits has a glass handle that can be unscrewed and used as a glass tube.

SUNDAY READINGS.

SELECTED BY CHANCELLOR J. H. VINCENT, LL.D.

[December 6.]

In the seventeenth century, the minister of the parish of Anwoth, on the shores of Galloway,¹ was the famous Samuel Rutherford,² the great religious oracle of the Covenanters and their adherents. It was, as all readers of his letters will remember, the spot which he loved most on earth. The very swallows and sparrows which found their nests in the church of Anwoth were, when far away, the objects of his affectionate envy. Its hills and valleys were the witnesses of his ardent devotion when living; they still retain his memory with unshaken fidelity. It is one of the traditions thus cherished on the spot, that on a Saturday evening, at one of those family gatherings whence, in the language of the great Scottish poet,

"Old Scotia's grandeur springs,"

when Rutherford was catechising his children and servants, that a stranger knocked at the door of the manse, and (like the young English traveller in the celebrated romance which has given fresh life to these same hills in our own age), begged shelter for the night.

The minister kindly received him, and asked him to take his place amongst the family, and assist at their religious exercises.

It so happened that the question in the catechism which came to the stranger's turn was that which asks:

"How many commandments are there?"

He answered: "Eleven."

"Eleven!" exclaimed Rutherford, "I am surprised that a person of your age and appearance should not know better. What do you mean?"

He answered: "A new commandment I give unto you, That ye love one another; as I have loved you, that ye also love one another. By this shall all men know that ye are my disciples, if ye love one to another." Rutherford was much impressed by the answer, and they retired to rest.

The next morning he rose early to meditate on the services of the day. The old manse of Anwoth stood—its place is still pointed out—in the corner of a field, under the hillside, and thence a long, winding, wooded path, still called Rutherford's Walk, leads to the church. Through this glen he passed, and, as he threaded his way through the thicket, he heard amongst the trees, the voice of the stranger at his morning devotions. The elevation of the sentiments and of the expressions convinced him that it was no common man. He accosted him,

and the traveller confessed to him that he was no other than the great divine and scholar, Archbishop Usher,³ the primate of the Church of Ireland, one of the best and most learned men of his age, who well fulfilled that new commandment in the love which he won and which he bore to others; one of the few links of Christian charity between the fierce contending factions of that time, devoted to King Charles I., in his lifetime, and honored in his grave by the Protector Cromwell. He it was who, attracted by Rutherford's fame, had thus come in disguise to see him in the privacy of his own home.

The stern Covenanter welcomed the stranger prelate; side by side they pursued their way along Rutherford's Walk to the little church, of which the ruins still remain; and in that small Presbyterian sanctuary, from Rutherford's rustic pulpit, the Archbishop preached to the people of Anwoth on the words which had so startled his host the evening before:

"A new commandment I give unto you, That ye love one another; as I have loved you, that ye also should love one another."—*Dean Stanley.*

[December 13]

* If we can easily imagine the surprise of the pious Scotchman when he first heard of an eleventh commandment, much more may we figure to ourselves the surprise of the apostles when they, for the first time, heard this new commandment from the lips of their Divine Master.

What? Are not the Ten Commandments enough? Must we always be pressing forward to something new? What is this that He saith? "A new commandment?" We cannot tell what he saith.

True it is that on those old Ten Commandments much more on the Two great Commandments, hang all the law and the prophets. They contain all the landmarks of our duty—the landmarks of our religion. But there is yet a craving in the human heart for something even beyond duty, even beyond reverence. There is a need which can only be satisfied by a new, by an Eleventh Commandment, which shall be at once old and new—which shall open a new field of thought and exertion for each generation of men; which shall give a fresh undying impulse to its older sisters—the youngest child (so to speak) of the patriarchal family, the youngest and holiest and best gifts of Him who has kept the good wine till the last. Many a false Eleventh Commandment has been put forth by the world to supply this want in its way; many a false Eleventh Commandment has been put forth by the churches in their way. But the true new commandment which our Saviour gave was, in its very form and fashion, peculiarly characteristic of his way—peculiarly characteristic of the Christian religion.

The novelty of the commandment lay in two points. First, it was new, because of the paramount, predominant place which it gave to the force of the human affections, the enthusiasm for the good of others, which was—instead of ceremonial, or mere obedience, or correctness of belief—henceforth to become the appointed channel of religious fervor. And secondly, it was new, because it was founded upon the appearance of a new character, a new manifestation of the character of man, a new manifestation of the character of God. Even if the four Gospels had been lost, we should see from the urgency with which the apostles press this new grace of love or charity upon us, that some diviner vision of excellence had crossed their minds. The very word which they used to express it was new, and the consequences therefore were new also. "Love one another," was the doctrine of Jesus Christ, "as I have loved you."

The solid blocks or tables on which the Ten Commandments were written were of the granite rock of Sinai, as if to teach us that all the great laws of duty to God and duty to man were like that oldest primeval foundation of the world—more solid, more enduring than all the other strata; cutting across all the secondary and artificial distinctions of mankind; heaving itself up, now here, now there; throwing up the fan-

tastic crag, there the towering peak, here the long range which unites or divides the races of mankind. That is the universal, everlasting character of duty. But as that granite rock itself has been fused and wrought together by a central fire, without which it could not have existed at all, so also the Christian law of Duty, in order to perform fully its work in the world, must have been warmed at the heart and fed at the source by a central fire of its own—and that central fire is Love—the gracious, kindly, generous, admiring, tender movements of the human affections; and that central fire itself is kept alive by the consciousness that there has been in the world a Love beyond all human love, a devouring fire of Divine enthusiasm on behalf of our race, which is the Love of Christ, which is of the utmost essence of the Holy Spirit of God. It is not contrary to the Ten Commandments. It is not outside of them, it is within them; it is at their core; it is wrapped up in them, as the particles of the central heart of the globe were encased within the granite tables in the Ark of the Temple.

The love wherewith Christ loved us, the new love wherewith we are to love one another, is universal, because in its spirit we overcome evil simply by doing good. We drive out error simply by telling the truth. We strive to look on both sides of the shield of truth. We strive to speak the truth in love, that is, without exaggeration or misrepresentation; concealing nothing, compromising nothing, but with the effort to understand each other, to discover the truth, which lies at the bottom of error; with the determination cordially to love whatever is lovable even in those in whom we cordially detest whatever is detestable.—*Dean Stanley.*

[December 20.]

CHRISTMAS SONG.

As with gladness men of old
Did the guiding star behold;
As with joy they hailed its light,
Leading onward, beaming bright;
So, most gracious Lord, may we
Evermore be led to thee.

As with joyful steps they sped
To that lowly manger-bed,
There to bend the knee before
Him whom heaven and earth adore;
So may we with willing feet
Ever seek the mercy-seat.

As they offered gifts most rare
At that manger rude and bare;
So may we with holy joy,
Pure and free from sin's alloy,
All our costliest treasures bring,
Christ, to thee, our heavenly King.

Holy Jesus, every day
Keep us in the narrow way;
And, when earthly things are past,
Bring our ransomed souls at last
Where they need no star to guide,
Where no clouds thy glory hide.

—*Dr. W. C. Dix.*

[December 27.]

A HAPPY NEW YEAR TO YOU.

New mercies, new blessings, new light on thy way;
New courage, new hope, and new strength for each day;
New notes of thanksgiving, new chords of delight;
New praise in the morning, new songs in the night;
New wine in thy chalice, new altars to raise;
New fruits for thy Master, new garments of praise;
New gifts from His treasures, new smiles from His face;
New streams from the Fountain of infinite grace;
New stars for thy crown, and new tokens of love;

New gleams of the glory that waits thee above;
New light of His countenance full and unpriced;
All this be the joy of thy new life in Christ!

NEW YEAR'S WISHES.

What shall I wish thee?
Treasures of earth?
Songs in the spring-time?
Pleasures and mirth?
Flowers on thy pathway?
Skies ever clear?
Would this ensure thee
A Happy New Year?
What shall I wish thee?
What can be found
Bringing thee sunshine
All the year round?
Where is the treasure,
Lasting and dear,

That shall ensure thee
A Happy New Year?

Faith that increaseth,
Walking in light;
Hope that aboundeth,
Happy and bright;
Love that is perfect,
Casting out fear;
These shall ensure thee
A Happy New Year.

Peace in the Saviour,
Rest at His feet,
Smile of His countenance
Radiant and sweet,
Joy in His presence!
Christ ever near!
This will ensure thee
A Happy New Year!

—Frances Ridley Havergal.

HOW THE OLD WORLD BECAME THE NEW; OR THE RELATION OF ROMAN TO MODERN EUROPEAN HISTORY.

BY WILLIAM CLEAVER WILKINSON, D.D.

The gladiatorial games were celebrated by great men in honor of their dead relatives, by officials on coming into office, by conquerors to secure popularity, and on every occasion of public rejoicing, and by rich tradesmen who were desirous of acquiring a social position. They were also among the attractions of the public baths. Schools of gladiators—often the private property of rich citizens—existed in every leading city of Italy, and, besides slaves and criminals, they were thronged with freemen, who voluntarily hired themselves for a term of years. In the eyes of multitudes, the large sums that were paid to the victor, the patronage of nobles and often of emperors, and still more the delirium of popular enthusiasm that centred upon the successful gladiator, outweighed all the dangers of the profession. A complete recklessness of life was soon engendered both in the spectators and the combatants. The 'lanistæ,' or purveyors of gladiators, became an important profession. Wandering bands of gladiators traversed Italy, hiring themselves for the provincial amphitheatres. The influence of the games gradually pervaded the whole texture of Roman life. They became the commonplace of conversation. The children imitated them in their play. The philosophers drew from them their metaphors and illustrations. The artists portrayed them in every variety of ornament. The vestal virgins had a seat of honor in the arena. The Colosseum, which is said to have contained more than 80,000 spectators, eclipsed every other monument of imperial splendor, and is even now at once the most imposing and the most characteristic relic of pagan Rome.

"In the provinces the same passion was displayed. From Gaul to Syria, wherever the Roman influence extended, the spectacles of blood were introduced, and the gigantic remains of amphitheatres in many lands, still attest by their ruined grandeur the scale on which they were pursued. In the reign of Tiberius, more than 20,000 persons are said to have perished by the fall of the amphitheatre at the suburban town of Fidenæ. Under Nero, the Syracusans obtained, as a special favor, an exemption from the law which limited the number of gladiators. Of the vast train of prisoners brought by Titus from Judea, a large proportion were destined by the conqueror for the provincial games. In Syria, where they were introduced by

Antiochus Epiphanes, they at first produced rather terror than pleasure; but the effeminate Syrians soon learned to contemplate them with a passionate enjoyment, and on a single occasion Agrippa caused 1,400 men to fight in the amphitheatre at Berytus. Greece alone was in some degree an exception. When an attempt was made to introduce the spectacle into Athens, the cynic philosopher, Demonax, appealed successfully to the better feelings of the people by exclaiming, "You must first overthrow the altar of Pity!" The games are said to have afterwards penetrated to Athens, and to have been suppressed by Apollonius of Tyana; but with the exception of Corinth, where a very large foreign population existed, Greece never appears to have shared the general enthusiasm.

* * * * *

"The mere desire for novelty impelled the people to every excess or refinement of barbarity. The single combat became at last insipid, and every variety of atrocity was devised to stimulate the flagging interest. At one time a bear and a bull, chained together, rolled in fierce contest along the sand; at another, criminals dressed in the skins of wild beasts were thrown to bulls, which were maddened by red-hot irons, or by darts which were tipped with burning pitch. Four hundred bears were killed on a single day under Caligula; three hundred on another day under Claudius. Under Nero, four hundred tigers fought with bulls and elephants; four hundred bears and three hundred lions were slaughtered by his soldiers. In a single day, at the dedication of the Colosseum by Titus, five thousand animals perished. Under Trajan, the games continued for one hundred and twenty-three successive days. Lions, tigers, elephants, rhinoceroses, hippopotami, giraffes, bulls, stags, even crocodiles and serpents, were employed to give novelty to the spectacle. Nor was any form of human suffering wanting. The first Gordian, when 'ædile,' gave twelve spectacles, in each of which from one hundred and fifty to five hundred pairs of gladiators appeared. Eight hundred pairs fought at the triumph of Aurelian. Ten thousand men fought during the games of Trajan. Nero illumined his gardens during the night by Christians burning in their pitchy shirts. Under Domitian, an army of feeble dwarfs was compelled to fight, and more than once, female gladiators descended to perish in the arena. A

criminal personating a fictitious character was nailed to a cross, and there torn by a bear. Another, representing Scaevola, was compelled to hold his hand in a real flame. A third, as Hercules, was burnt alive upon the pile. So intense was the craving for blood, that a prince was less unpopular if he neglected the distribution of corn than if he neglected the games; and Nero himself, on account of his munificence in this respect, was probably the sovereign who was most beloved by the Roman multitude. Heliogabalus and Galerius are reported, when dining, to have regaled themselves with the sight of criminals torn by wild beasts. It was said of the latter that he never supped without human blood.

"It is well to look steadily on such facts as these. They display more vividly than any mere philosophical disquisition the abyss of depravity into which it is possible for human nature to sink. They furnish us with striking proofs of the reality of the moral progress we have attained, and they enable us in some degree to estimate the regenerating influence that Christianity has exercised in the world; for the destruction of the gladiatorial games is all its work. Philosophers, indeed, might deplore them, gentle natures might shrink from their contagion, but to the multitude they possessed a fascination which nothing but the new religion could overcome."

The end of gladiatorial shows was during the fifth, or about the beginning of the sixth century. What abolished them was not imperial decree, but that growth in the general sentiment of humaneness which Christianity had produced.

The Roman Empire, still theoretically one, was, late in the fourth century, for purposes of administration, divided into two departments, the empire of the East, and the empire of the West. The empire of the West is generally considered to have been overthrown in the year 476, while an emperor called, in contemptuous diminutive, Romulus Augustulus, was reigning. The line of the Roman emperors was, after that year, continued in the sovereigns who held their capital in Constantinople. (When Constantinople finally, in the year 1453, fell into the hands of the Turks, the Eastern Empire was extinguished.) Meantime, however, the formation of those separate nationalities which Europe now comprises was delayed for centuries.

The name and tradition of the empire was still strong enough to be felt as an effective hindrance in the way of the predestined, eventual, political development of the continent. The sentiment of unity prevailed for a time over the sentiment of nationality, even over the barbaric sentiment of individualism. This remarkable fact is due in no small degree to the influence of Christianity, or, to speak more strictly, of the Roman Catholic church. The presence and example of the empire had naturally conformed to its own model the nascent organization of the church which the empire had adopted. The Roman Catholic church and the Roman Empire became virtually one and the same thing, viewed under two different aspects. The empire was the secular aspect of the church; the church was the religious aspect of the empire. Corresponding graduated hierarchies of officials existed in both organizations. The pope was spiritual emperor, as the emperor was temporal pope. The world-wide unity of the church became an idea and a passion with all Christians. Insensibly, but most really and most effectively, this feeling had been communicated from the church to the empire. Hence originated that so-called "Holy Roman Empire" of which, Mr. Bryce, in his volume with this title, emphatically says, p. 396:

"Into it all the life of the ancient world was gathered; out of it all the life of the modern world arose."

Voltaire, we believe it was, who with wit, if not with wisdom, memorably said that the Holy Roman Empire was a name false in every particular, since what it ostensibly named was, in the first place, not holy, in the second place, not Roman, and,

in the third place, not an empire. And true enough, this political institution was often marked by deeds and traits the reverse of holy; it was in race rather Teutonic than Roman; and its imperial character was rather titular than real.

But whatever may be justly said in criticism of the title, the Holy Roman Empire had a long and a momentous history. It began in 800, and it did not formally cease until, a thousand years later, in 1806, Emperor Francis II. resigned the imperial crown. We possess no continuous history of the Holy Roman Empire. When it was established by Charlemagne, it was the expression in organic political form of the sentiment of unity and order, in opposition to that sentiment of individualism and license native to the barbarian mind. These two forces, the centralizing and the divisive, contended for mastery during the protracted period occupied by the slow dissolution of the original Roman Empire. The process of disintegration was arrested, for a brief period of suspense, by the strong hand of Charlemagne. But the tendency was too mighty for any man permanently to resist.

The influence exerted for unity by the Roman Catholic church, (and the Roman Catholic church was almost identical with the Holy Roman Empire,) made the shock of the final downfall of the old political order, comparatively gentle and slight. In fact there was scarcely any shock at all. The ancient order of things crumbled to pieces, rather than fell. The feudal system came between that and the system of nationalities that now exists. The feudal system may be regarded as in effect a process of crystallization through which the political chaos resulting from the dissolution of the ancient Roman Empire passed, on its way to assuming its present form of organization into separate, independent, self-consisting sovereignties or states.

What was the feudal system? The feudal system was not one thing and the same for all times and all places. It does not accordingly admit of any one hard and fast definition. In general, it was a social or political condition in which the human community was arranged in a graduated scale of mutual dependence, from a ruler who was king, down through a descending hierarchy of degrees to the serf who was little more than a slave. There are various theories advanced to account for the rise of the feudal system. The Teutonic element and the Roman element, fused together in it, no doubt contributed each its share. The one essential and dominating idea in the system, that of mutual obligation between superior and inferior—protection to be afforded by the one, for an equivalent of service to be rendered by the other—was an idea common to both the Roman and the barbarian social state. Patron and client was a relation familiar even in republican Rome. This relation grew in importance with the growth of the empire. Thousands of slaves became freedmen, and the freedmen became clients of their emancipating masters. (Slaves might often be more useful to their masters as his freedmen than they were as his slaves. This motive led to voluntary manumission in innumerable cases.) On the other side, the barbarian chiefs had their retainers attached to their persons by ties of mutual service in war. Nothing could be more natural than that, when a roving barbarian tribe became sedentary in a conquered province of the Roman Empire, the land should be parcelled out by the chief to his subordinate leaders, then by these to their privates, on condition of service to be rendered in case of emergency arising through incursions or threats of an enemy. Here at once is the germ of the feudal system. Each principal holder of land would be in a state of inevitable rivalry with his neighbor. One would gain on the other, until finally a comparatively small holding would become a principality, or a principality a kingdom. Meantime, towns and cities would spring up, or revive, and acquire wealth and power enough to stand against the neighboring barons. The kings, hardly at first more than barons, would enlist the cities on their side, while the barons,

always in rivalry with each other, would be unable to league against either king or city. Thus the monarchical tendency reinforcing itself with the popular, made head against the patriarchal, or aristocratic, and in process of time out of the confusion and anarchy of the so-called feudal system arose the monarchies and empires of modern Europe. (Walter Scott's romance, "Quentin Durward" affords an interesting and suggestive, if also in some respects misleading, study of the historical process by which the institution of monarchy became established in France.)

The institution of chivalry had an important part to play in improving the condition and the manners of European society. This institution had its recognized laws and usages curiously blended from barbarism on the one side and Christianity on the other. The effect of it was to relieve the distresses of the lower classes, and to elevate the character and tone of the higher. The influence too of the Roman Catholic church, corrupt as this body was, constantly tended to mitigate the atrocities of war, to afford an asylum for the victims of violence, to repress crime of every sort—except the crime that might be committed by the hierarchy itself.

There are three forces essential in the bringing about of the change that has supervened in European society of which we have taken no account. These are Literature, Language, Law.

The imperial system established by Julius Cæsar was finally fatal to the life of literature in the empire. Literature gradually ceased to be a living force in society. It came about at last that emperors reigned who could not even write their own name. Literature, indeed, was so far from being still in course of production, that the classics of former ages were no longer even studied or known. Nay, these monuments of mind narrowly escaped being lost altogether out of the world. Night settled down upon the human race. The Dark Ages spread like a pall over a world intellectually dead. What saved Greek and Roman classics from being irretrievably lost, was an institution of the Roman Catholic church, which we Protestants are accustomed, and properly, to condemn as a fountain of evil—the monastic system. When there were no private, no public, libraries, when devastation swept, in tide after tide of ruthless destruction, over everything in Europe that did not bear on it the magical mark of the Roman Catholic church, then, in the inviolate monasteries, were left to slumber in their dust, copies of Cicero and Aristotle, and of the ancient authors in general, ready for resurrection at the call of Divine Providence. The invention of printing, the Lutheran Reformation, the revival of learning, found at hand literatures existing in Latin and in Greek, to supply the needed nutriment for the just awakened human mind.

The Latin language had been kept, after a sort, alive by use in the ritual of the Roman Catholic church. That language became the basis on which were founded in Italy, the Italian, in France, the French, in Spain, the Spanish, in Portugal, the Portuguese, languages. These languages grew from age to age in the mouths of the people that spoke them. They did not become finally fixed in form until great books were written in them. The less thoroughly conquered and Romanized Teuton in Germany, and in Great Britain, kept to their native speech, but that speech was profoundly modified by the influence of Latin and Greek.

When I was a small urchin, and heard grown up people talking enthusiastically about "Lamb's Tales," I thought, as a matter of course, they were conversing about something to eat; for the subject of food is commonly uppermost in a boy's mind. I remember watching the woolly flocks in our neighborhood as they nibbled the grass, and wondering how people cooked those stumpy appendages. But, as I grew older, I came to learn, that, although "Lamb's Tales" were not what I imagined them to be, they were far more nutritious, and eminently worthy of

Roman law has been a prodigious force in the history of civilization. This element in Roman energy is by eminence the one that may be regarded as still unspent, indeed as destined to last as long as the world lasts. Virgil said truly that Rome was born to rule the nations. She, in no mean degree, does this yet through her jurisprudence. It is asserted, perhaps with truth, that to Roman law, and to Roman law as yet untouched with the finger of Christianity, we owe the legal principle, long so beneficently operative in jurisprudence, that beyond and above all human enactment there is a paramount law of nature entitled to supreme regard. The doctrine of the "higher law," so-called, is as ancient as Greek stoicism. It was incorporated into recognized and accepted jurisprudence by the pagan Roman Empire. The one truly fruitful principle of Roman law, the principle that, starting in Rome, has impressed a benignant and beneficent philosophy on all subsequent jurisprudence, is the doctrine that to the antecedent immutable law of nature every ordinance of human legislation should be brought to conform. The good influence of this principle is felt not less in the interpretations and decisions of the judicial bench, than in the enactments of legislatures.

The foregoing, has been of course, a very inadequate presentation of a great subject. It will have accomplished its purpose, if it shall serve truly to suggest the way in which the chasm has to be bridged in thought that yawns between ancient civilization and modern. Different historical philosophers offer different theories of the course of events. But this may be laid down as the guiding principle of our thought in any historical study: Changes that take place in society are due to changes that take place in individual members of society. (In applying this principle, we must correct by making allowance for the powerful reaction of society as a whole upon the individual member of society.) If society has become other and better than it anciently was, this is for the reason that men and women are other and better than once they were. And certainly no other factor of beneficent change in the character of individual men and women, has been on the whole anything like so potent as Christianity. Christianity accordingly must, in any wise philosophy of history, be credited with the chief part in improving the world from what it was to what it is.

Guizot's "History of Civilization," Bryce's "Holy Roman Empire," Merivale's "Conversion of the Empire," Uhlhorn's "Conflict of Christianity with Heathenism," Hallam's "Middle Ages," Lecky's "History of European Morals," Montesquieu's work translated under the title "Grandeur and Decline of the Romans," of course Gibbon's "Decline and Fall of the Roman Empire," and that most interesting and suggestive of general historical treatises, Dew's "Digest of Ancient and Modern History," are among the books throwing light on the present subject, that may profitably be consulted by the student desirous to prosecute further his investigations. Dr. W. C. Morey's recent work on Roman Law receives high commendation as an excellent source of information on its own special topic. Dr. C. K. Adams's excellent "Manual of Historical Literature" will supply additional names and characterizations of books useful for the same purpose.

all the praise I had heard bestowed upon them. It is well for us all to accustom the mind to keep the best company by introducing it only to the best books. What precious time is thrown away in days like these, on the habitual perusal of works that ought never to have been written! Why should we go about to discover what is the newest publication, and what is the name of the writer of it, when, in all modern English literature, there is no name more fragrant than that of the author of "Elia's" essays?

—James T. Fields in "Princes, Authors, and Statesmen."

MODERN ITALY.

BY PRESIDENT D. H. WHEELER, D.D., LL.D.

We have had to touch upon some of the events of 1848-9 in our brief sketches of Pius Ninth, Garibaldi, Cavour, Mazzini, and Victor Emanuel. A few words will complete our bird's-eye view. In March, 1848, the popular enthusiasm forced King Charles Albert, of Piedmont to declare war upon Austria and to cross the Mincio¹ into Venetia. Lombardy, behind him, was in rebellion, and all Italy was supporting the Piedmontese army; but the Austrians had a strong army and a skillful general. Radetzky² defeated the pope's troops and the Piedmontese, and forced his way back to Milan. By the first of August, the Austrian power was re-established in the north, and by the end of August, Ferdinand was again master in Sicily, which had revolted in January. The usual course of events had been followed. It was only necessary that the pope should renounce the liberal alliance. His first step backward provoked conflict in Rome. The atheistic republicans stirred up discontent. The pope's minister, Count Pellegrino Rossi,³ was murdered. The pope himself fled in disguise to Gaeta.⁴ Here Pius Ninth changed his political attitude, and began the year 1849 with a threat to excommunicate the Romans. The effect was the usual one; one extreme begat the other. In Rome, the most ultra and violent radicals became masters of the situation. Liberty was trampled under foot in Naples and Milan by reactionary governments; in Rome, by radical revolutionists. In April, 1849, a French army approached Rome to recover it for the pope; in August, they defeated Garibaldi and Mazzini, and took possession of the city. The last of the Roman revolutions ended in the restoration of the papal government without any constitution or national guards. The French troops remained the guardian of the papal power, until, in 1870, they were called home by the dying agonies of the Second Empire. In Piedmont, the year 1849 brought a great humiliation, and a great hope along with it. In March, Charles Albert once more entered the field against the Austrians; on the 24th, Radetzky won another Austrian victory at Novara; Charles Albert abdicated; Victor Emanuel became "King of Sardinia." His little kingdom was not a menace to any great power; his mother and wife were Austrian archduchesses; his family was among the oldest wearing crowns in Europe; and so the young king was left in his ancestral possession by the conquering powers. Charles Albert went away to Oporto,⁵ and died broken-hearted. The young victor entered upon a safe and glorious journey to the throne of Italy. The age of fruitless revolts, of declamatory politics, of universal republics, of useless bloodshed, of paper constitutions, and of Utopian republics, was at an end. There began then the making, by practical methods, of a constitutional kingdom with this Piedmontese prince at its head.

What circumstances had indicated to the thoughtful the probable success of this method of constituting Italy a nation?

(1) The perfection of liberal institutions in England under a monarchy had shown that monarchy and liberty are compatible—a king might be the head of a free people. (2) This possibility had been made a reality in Piedmont, where constitutional liberty existed in perfection. (3) The history of Italy was not friendly to republics; the people had never possessed the attributes of a modern nation; there had been mobs or despotisms. (4) An Italian republic would lack solidity, and it would probably be an object of jealous suspicion to the neighboring monarchs. (5) The rivalries of the governments of western Europe would afford Italians opportunities for coming together under an ancient royal house. (6) Of all the reigning families in the peninsula, that of Piedmont alone was

both Italian and liberal. (7) Piedmont had statesmen who had naturalized English parliamentary government on Italian soil, and had begun to show breadth and vigor as political and diplomatic managers. The union of Italy would require a throne supported by practical sense; and in Piedmont alone had political sense become a habit of public life. For these and other reasons, the Italians began, after the relapse of Pius Ninth, to fix their hopes upon the son of Charles Albert; and, from 1850 onward, the liberals of other sections took and gave counsel with the statesmen of Turin. The people of Italy, it was now known, would gladly enter into such a union. Popular feeling was rife everywhere for revolt. The insurrectionary spirit had to be held in check. Collisions with the despotic princes must be avoided. The foreign opportunity must be sought diligently and awaited patiently. This plan of operations rested and refreshed the nation, and roused its spirit for the final struggle.

The first indications of the genius of Cavour, were given in the Crimean war. Piedmont entered into the English and French alliance, and Italian soldiers participated with honor in the battle of Tchernaya.⁶ It was not a great fact for the outside world, but it did show the existence and respectability of the government of Victor Emanuel. At home, it was a very significant event, that an Italian army, wearing the uniform of Piedmont, was fighting in the Black Sea, side by side with the armies of France and England. It was not theatrical statesmanship; but if it was, its theatrical grade was so high as to have all the value of reality. It turned all Italian eyes upon the government at Turin. It was in all ways a preparation. The nation waited until 1859. Through the three previous years, Cavour had studied and probed the heart of Napoleon Third. France must give to Turin the opportunity to make Italy one under Victor Emanuel. His hope was realized. How Cavour influenced Napoleon is not fully known. The facts preceding the war of 1859, are substantially as follows:

Austrian government in Lombardy grew more tyrannical after 1849. In fact, Austrian possession of the country had become impossible, except through oppressive methods. Only a narrow stream, the Ticino,⁷ separated the suffering Lombards from their free brethren in Piedmont. Discontent was universal, and the government at Vienna saw clearly that the success of Piedmont was a standing menace, growing more formidable every year, to its own power in Italy. At the end of 1858, Austria complained to the other governments of Europe that Piedmont was a perpetual disturber of the peace in Italy. Then she withdrew her minister from Turin, and demanded that Piedmont be disarmed. Louis Napoleon took up the challenge, crossed the Alps with an army, drove Austria out of Lombardy, and added it to the kingdom of Victor Emanuel. Italy needed but this French intervention against Austria. The parts of Italy flew together of themselves. In twelve months the nation was constituted by instinctive movements of the populations of the center and south.

There is a passage in the speech of Victor Emanuel at the opening of his parliament in January, 1859, which will always be memorable. It displays the forethought and genius of Count Cavour. The king said: "We are not insensible to the cry of suffering, (*grido di dolore*), which rises to us from so many parts of Italy." Cavour knew that the nation was panting in the leash. Napoleon set it free. We need no other proofs than the order of events. A few dates will tell the story better than many words. The coming of the French was

known in March; the chief battles of the campaign were Magenta, June 4, and Solferino, June 24. Before the battle of Magenta, the princes of Modena, Parma, and Tuscany fled, and the Romagna was soon after freed. Before April, 1860, the whole center down to the Papal frontier was added to the kingdom of Italy by the free act of the people. In March, 1860, began a popular movement in the south, which under the inspiration of Garibaldi, united the entire Neapolitan territory to the nation by popular suffrage. In November, Count Cavour wrote to Berlin: "We are Italy; we work in her name; but at the same time it is our policy to moderate the national movement and maintain the monarchical principle." The siege of Gaeta by the national troops lasted until February, 1861, but the national unity was accomplished in the previous year.

Some details of the events between June, 1859, and November, 1860,—the eighteen months of emancipation—will reward our pains. In the north, Italy had two terrible surprises. Napoleon had promised to make Italy free from the Alps to the Adriatic. He emancipated Lombardy, and left Austria intrenched in the quadrilateral of Venetia. The disappointment was terrible. Men said: "It is the old failure over again." But the result did not justify these fears. Austria remained in Venetia until 1866, but she was never able to unsettle the Italian kingdom. Italy at length became free to the Adriatic by the development of the lines of policy laid down by Cavour. The other surprise was more cruel. It was learned in March, 1860, after central Italy had joined the kingdom, that by a secret treaty Napoleon was to take Nice and Savoy from Piedmont. It had been Count Cavour's bait for the ambition of Napoleon to enlarge France. Success elsewhere made this surprise less crushing. Italians saw that their king had sacrificed his home to the commonwealth. Garibaldi raged, and Count Cavour's vast services were almost forgotten in the shock of what the Mazzinisti called "the betrayal of Italy to a life-long enemy." It was not the sentimental politics, which never won a solid victory for Italy, but it was nevertheless sound statesmanship. We may not forgive Napoleon for taking, but we must respect Count Cavour for giving Nice and Savoy.

The details of the southern movements into the union are more interesting. All previous revolutions had begun below Piedmont. The Italians of the other provinces always affected to despise these "petty Puritans" of the Alpine kingdom. When Genoa was annexed to Piedmont, in 1815, the Genoese were disgusted, and at a later time broke out into insurrection. "They are not Italians" was a common feeling and complaint of Italians in the south, when they thought or spoke of Turin and its government. The farther south one went, the stronger became the repulsion of feeling. It was easy for the people, aided by Garibaldi, to throw off the Bourbon yoke. But then they hesitated to join the kingdom of Italy. Mazzini appeared on the scene with his republican dreams and influenced Garibaldi to hesitate in his loyalty to the national plan. The danger became so serious that Count Cavour sent an Italian army into the south, and Victor Emanuel himself visited the country. The king and Garibaldi met, and the hero of Marsala returned to his allegiance to "Italy united under Victor Emanuel." The south passed into the kingdom with less reluctance after the king had appeared on the scene and his Piedmontese had defeated the troops of the Bourbon; but the unlikeness of the two sections, Piedmont and Naples, has continued to be one of the difficulties of Italian statesmanship.

In November, 1861, the kingdom of Italy was constituted and secure. The pope remained master of his states, but the kingdom held the whole line of the Adriatic and the Mediterranean, except a few miles of shore at Civita Vecchia. Venice remained Austrian, but Austrian invasion had ceased to be a danger, and the Venetians were in full sympathy with the Italian nation. Statesmanship had immense tasks in the demoralized condition of the provinces, in the ignorance of the

people, and the absence of all modern implements of civilization. Italy had to establish public education, create an army and navy, build high-roads and railroads, encourage manufactures, develop commerce, and by all these improvements, to consolidate the people into a living, national organism. At the same time, it had to solve the most perplexing problem of all history—the Roman question. The Venetian question could wait on foreign events. The Roman question was a fire in the bones of the nation. It disturbed the southern provinces. Francis, the deposed king of Naples, took up his residence in Rome where, recognized as a king by Pius Ninth, he employed a princely revenue in promoting brigandage and other forms of disorder in his late kingdom. It was a question of the capital of Italy. All the principal cities had been capitals, and were jealous of each other's supremacy; only to Rome, mother of their civilization, would they all submit. Above all, it was a religious question, bound up in traditional politics, and meshed in foreign relations. The pope was historically a sovereign recognized by all the nations of Europe. He was the head of the church to Italians, in common with Frenchmen, Swiss, and Germans. The distinction between his office as head of the church, and king of Rome, was clear enough in Italy; but abroad, the throne of the king was regarded as essential to the dignity of the mitre of the supreme bishop of the faithful. To touch Rome was to alarm the Catholic world. Besides, French soldiers stood guard over the papal dominions. Cavour was said to have studied out a solution, and he might have succeeded in a diplomatic untangling of the knot. Italy, however, after the death of Cavour, fell back upon the safe way—to wait for a foreign complication. But waiting was difficult, because some of the Italians would not wait. Garibaldi was especially impatient, influenced, no doubt, by Mazzini and his republican friends and agents. In 1848, Mazzini had set up a republic in Rome, of which Garibaldi had been the military head. Both of them clung to their dream with perilous tenacity. In 1861, they very nearly defeated the union of the south with Italy by their mad determination to march upon Rome from Naples. Garibaldi renewed his attempt to take Rome in 1862, and in a petty engagement between the Garibaldians and the king's troops, received a wound in the foot. Garibaldi claimed that, in this instance, as in his Sicilian expedition in 1860, he supposed himself to be executing the wishes of the Turin government. It is probable that Mazzini, who was always a king-phobist, may have made Garibaldi think so. The obstacle to the possession of Rome by Italy, was France and her occupation of the papal states. Italy must wait the hour of French trouble at home. Under the same Mazzinist influence, Garibaldi assailed Rome again in 1867. Italian diplomacy had secured the withdrawal of French troops from Rome; but Victor Emanuel had promised to respect and protect the papal frontier, and he never broke faith. The result was that the French went back to guard the pope's dominions. Italy must wait.

We have given full weight to the *legality* of the pope's title to his dominions. But a government cannot rest on legal precedent. The Declaration of American Independence says it is self-evident that "governments derive their just powers from the consent of the governed." The most devout Catholic must admit that the Catholics whom Pius Ninth governed in Italy, did not consent to be governed by him. The transfer of power was made in Rome, as everywhere else in Italy, by a popular vote. The vote stood as follows: In the papal states, for the pope, 1,501; for Victor Emanuel, 133,681. In the city of Rome, for the pope, 46; for Victor Emanuel, 40,783. Independently of this vote, it is well known that the people of Rome were discontented under papal rule; the unimpeachable testimonies to that discontent had abounded for many years. And we have to remember also that it was Roman Catholic Italy—an Italy having only a handful of Protestants in all its territory—which demanded Rome for the capital city of the whole nation.

The looked-for complication came in 1870, when the French withdrew from Rome, in the midst of their defeats by German armies. Then Italy seized Rome and relieved the pope of the cares of government. The auspicious moment for Venetian emancipation had come four years earlier. When Prussia proposed her war upon Austria in 1866, the Italian statesmen, following the ideas of Cavour, entered into alliance with Prussia, and engaged to attack Austria in Venetia, while Prussia invaded the German states under Austrian control. This campaign was for Prussia a brilliant success. The march in concentric lines to Koeniggratz⁸ and the victory on that field made the German empire possible. For Italy, the campaign of 1866 was a new humiliation. She was defeated in the Adriatic in the naval battle of Lissa,⁹ and in the quadrilateral in the bloody action of Custoza.¹⁰ The latter defeat was probably the result of an accident which could not be foreseen. Custoza is a petty village at the foot of a commanding eminence. The eminence is called Belvedere, because it commands a wide view over the city of Verona and its fertile plain. The Austrian war maps attached the name of the village to the eminence. General Lamarmora¹¹ ordered his left wing to seize and firmly hold Custoza. His order was obeyed to the letter, and a well-planned, and otherwise well-executed, battle was lost because Belvedere heights were not occupied according to the intention of General Lamarmora.

The failure of Austria in her German campaign compelled her to surrender Venetia. The cession was a comedy. Napoleon III. had said in 1859 that Italy should be free from the Alps to the Adriatic. He did not then keep his promise but left Austria in Venetia. The Prussian victory of 1866 afforded the French emperor an opportunity to redeem the dishonored half of his pledge. Austria did not wish to give Venetia to Italy; she ceded it to Napoleon III. and he permitted the Venetians to annex themselves to Italy by popular vote. It were well, however, if sovereigns habitually kept as close to their pledged word as did Napoleon III. in this instance. In Italy, kings were always liars and cheats, except in little Piedmont. The treacheries of royalty and of governments had well nigh made faith in a king as difficult as confidence in the devil. There can be no reasonable doubt that Louis Napoleon secured the cession of Venetia to united Italy.

With the occupation of Rome the history of the Italian revolution ends. The capital had been removed from Turin to Florence in 1864. By his assent to this change of capital the king testified his perfect submission to the will of his people. His title ran, "King of Italy by the grace of God and the will of the People." Turin was dear to him, but a change of seat was essential to mark the enlargement of the people whose will had made him king. The capital remained at Florence only four years. At the end of 1870, the Capitoline Hill received its modern and popular Cæsar. The parliament representing the people, assembled in Rome, and the government continued its course under the rule which Cavour had naturalized in Turin, "The king reigns, the parliament governs."

The parliament voted the pope a magnificent income, and by the law of guaranties secured to the head of the church as much of rights and immunities as a free people could grant. Pius Ninth refused to accept anything at the hands of "robbers," and affected to consider himself a "prisoner in the Vatican." His successor has followed his example. The Catholic world has made up to the papal see the revenues lost by the nationalization of Rome. There have been some petty disturbances, but, on the whole, the world at large must regard the present system as a vast improvement upon the old. The relations of pope and king are not those of bad neighborhood, though non-intercourse is as far as possible the policy of the pope. The Italian constitution makes the Catholic religion national, but tolerates all forms of faith. Probably reconciliation will come after some painful memories grow faint.

United Italy has enjoyed fifteen years of repose. One must

go far back to find so large a tract of Italian peace. The public life of the nation is encompassed with a general sense of security. The statesmanship has been practical, and it has attained as much success as seems to have been possible. The kingdom assumed all the public debts of the old governments, and had to expend rapidly vast sums in public improvements and works of defense. Its paper money was at a discount from 1868 to 1882. In the latter year, it resumed specie payment. The taxes have been very heavy; few people would have borne them with so much patience; but the government has passed its financial crisis, and the burdens of the people are undergoing a gradual reduction. Emancipation and unity have not justified the glowing expectations of enthusiasts; but Italians control their own destinies, and are in no danger of falling back into separation and bondage.

In 1878, the excommunicated king, and the pope who had cursed him with the curse of God, both died in Rome. The king was the first to die; and it is said that the heart of Pius Ninth yearned towards the dying monarch, and forgave him right royally. To the king, who was thoroughly devout in creed and spirit, his duty to Italy in the matter of Rome, had been a severe trial. The "honest man who was king" would never have robbed the weakest priest, and never lost his religious reverence for the pope. And yet the love of his people made up to him for the official wrath of a spiritual prince who, according to many reports, loved and respected the honest king through all their conflicts of interest. King Humbert, the eldest son of Victor Emanuel, has reigned in Italy for seven years. He had married—departing from royal traditions—a subject of his government, an Italian countess, and Queen Margaret¹² is the most beloved person in all Italy. The king pursues the policy of his father, leaving the people to govern themselves through the parliament and ministry. This policy served his father through a glorious reign; it has the advantage over most royal ideas of government that it has never to be changed or revised. His relations to Pope Leo XIII. are in outward form those of his father to Pius Ninth. To his people he has endeared himself by his manliness, and the thorough-going courage of his race. In 1884, when cholera was killing a thousand Neapolitans in a day, he visited Naples, made the rounds of the hospitals, and opened his purse and heart to his afflicted people. This conduct gave him a place beside his beautiful and gracious queen in the hearts of the Italians. If all thrones had been like this one, Italy would never have been a republic. A king and queen reigning (not governing) in such gracious royalty of form and spirit, add to the life of a nation a peculiar and refining charm.

The revolutionary period did not leave a trail of disorder behind it; a common and bitter fruit of revolutions. The Italians did not fight against each other except in the Sicilian campaign of Garibaldi, and the continuation of that campaign in the battles of the Volturro and the siege of Gaeta, and in some episodes which cost but little bloodshed. The great battles were those of 1859 against the Austrians, and the responsibility and honors of that campaign belong to the French. The battles of 1866 were fought by Italians against the Austrians in Venetia. It was not by the shedding of fratricidal blood that Italy came to her own; the revolution was a diplomatic and statesmanlike achievement; the general and enthusiastic desire of the Italians to come together under the roof-tree of the dynasty of Victor Emanuel found at last wise guides and able leaders. The general movement to liberal institutions, spreading round the world and creating parliaments even in Austria, disarmed the ancient enemies of unity at home and abroad. The fruits of that great world-motion towards freedom are enjoyed in all lands, even in Russia and Turkey. But to no other people has fallen so large a portion of those benefits as the Italians of modern Italy have gathered.

ITALIAN BIOGRAPHIES.

MICHEL ANGELO.

Michel Angelo Buonaroti was born in Florence, in 1474. His family was descended from the famous Counts of Canossa who had been the noblest lords of northern Italy. Fortune, however, had not smiled on all their descendants, and they were often financially perplexed. In his earliest years, Michel Angelo gave evidence of the great creative genius which he possessed. The walls in the house of his nurse were covered with the sketches of his baby fingers. This nurse was the wife of a stone-mason who lived in the mountain quarries; and, in later years, the great sculptor used to say that it was no wonder he had such a love for his profession, as he had imbibed it in his infancy. Later, from the drawings on the ground floor of his father's house in Florence, could be traced his gradual development in painting. These tendencies caused uneasiness to his family, for their pride could not brook the thought that one of their number should demean himself by choosing the profession of an artist, which was then held in little esteem. But all resistance was in vain. The boy could learn nothing else, could do nothing else, for he had "only painting in his thoughts." Finally, in his fourteenth year, the father yielded, and bound him for three years to Ghirlandaio,¹ a noted artist. Before the expiration of this time, Michel Angelo attracted the attention of Lorenzo de' Medici, who had placed in his gardens a collection of many art treasures, which he threw open to the public. During one of his visits to these gardens, Michel Angelo copied the statue of an antique faun in a manner which so pleased Lorenzo that he sent for the boy's father, and made arrangements to have the whole care of the young artist's education devolve upon him. By placing the father in a higher government office, his consent was won. De' Medici received the young sculptor into his family, and cared for him as for a son.

The noblest minds of all Italy were attracted to Florence as a result of the efforts of the brilliant Lorenzo. "In the air of Florence," writes Vasari,² "there lies an immense stimulus to aspire after fame and honor. No one desires to stand on a level with the rest; every one aims higher." In this Mecca of the arts, Michel Angelo received great notice. This excited the jealousy of other eager aspirants, and at one time, Torregiano³ struck him such a blow with his mallet as to crush his nose flat to his face, and disfigure him for life. In justice to Torregiano, who was banished for this offense, it is only fair to say that young Michel was possessed of a seemingly arbitrary, overbearing disposition, and it was, probably, the smart caused by his rival's words that led him to his rash act. After the death of Lorenzo de' Medici, his son, Piero, extended his patronage to Angelo, though in a different way. This son delighted in a merry life, and, on one occasion, for the amusement of his guests, he set this man of genius, whose every effort should have been expended only on the most enduring material, to making a statue of snow in his palace yard.

When the Medici were sent into exile, Michel Angelo, being counted one of their adherents, was obliged to flee, and for a time lived in Bologna. After he returned to his father's house, he executed a Sleeping Cupid, which was so stained as to prevent the appearance of an antique. It was sold in Rome where it was greatly admired, and became the means through which its author was invited to that city, where he was soon launched upon his glorious career. Here he produced his famous *Pietà*,⁴ which is now an altar piece in St. Peter's. It represents the dead Christ lying upon the knees of the Virgin Mary. The work won for him great renown; and Florence immediately desired her most illustrious citizen to return and enrich his own city with the master-pieces of his art. Accepting her invita-

tion, he there executed a cartoon for the frescoes of the walls of the Palazzo Vecchio. The subject chosen was a group of soldiers bathing in the Arno, who had just been surprised by the trumpet of an enemy. Before it was destroyed, this was used as a model by all students of art; the variety of form and attitude, and the expression of surprise depicted being considered the best ever produced. He also here executed the colossal statue of David, which may now be seen in the Piazza del Gran Duca. Such was his absorbing interest in this piece of work that he often slept without removing his clothing, in order that he might go directly at it in the morning.

Michel Angelo was then summoned to Rome by Pope Julius II.,⁵ who wished to have a fine mausoleum erected in his honor. The work, begun with eagerness, was never finished, for the versatile pope called him away to commence another task, the decoration of the Sistine Chapel.⁶ In the incredibly short space of twenty-two months, he covered that great vaulted ceiling, one hundred and fifty feet in length by fifty feet in width, with scenes representing the fall and redemption of mankind. This magnificent work was finished when he was only in his thirty-ninth year. Later, under Clement VII.,⁷ he decorated the walls of this chapel, putting on one of them the grandest picture ever painted, the Last Judgment. Among the other works for which he also found time during this period, was the famous statue of Moses. This well-known work represents the great lawgiver seated, holding in one hand the tables of stone, and with the other grasping his long flowing beard. On his head are the horns, which, among the Egyptians, are typical of strength, power, and dignity.

As an architect, Michel Angelo's name is inseparably connected with St. Peter's at Rome, of which Gibbon speaks as "the most glorious structure that has ever been applied to the use of religion." His genius in architecture even surpasses that evinced in the other lines of art. Through the reign of five popes, he busily wrought on this great structure, refusing all compensation, delighting in the work as a service rendered to God.

Great engineering skill was also added to the list of Michel Angelo's acquirements or endowments. When the expelled Medici in 1537, sought to reinstate themselves in Florence by force, to his hands was committed the task of fortifying the city against their attacks. For nine months he held the besiegers at bay, and then treachery was the means which admitted them. Years after this, he was also entrusted with making new fortifications for Rome.

To give even a complete outline of Michel Angelo's works is beyond the limits of this article. This brief glance at only his leading productions must suffice, and the merest synopsis of the history of his life. His character was one to which all ages must turn with the highest respect and admiration. Against the dark background of vice and corruptions of all kinds then prevalent, his pure and spotless name stands out in strong relief. Throughout his long life, no breath of suspicion from any quarter ever tarnished his fair fame. The rugged, independent, at times almost fierce nature of the man, only throws into greater prominence this remarkable purity of life.

That one of such strong attachments should have passed his life unblest by home and family ties is cause for wonder. With all his genius, he possessed the simple love of a boy for his childhood's home. To his father who had probably been brought to financial ruin by the recklessness of another son, he once wrote: "Do not lose courage. * * * For if you have lost property, life is not lost, and I will do more for you than all you have lost. * * * Take care of your health, for it is of greater importance to me that you remain alive, although a

poor man, than that you should perish for the sake of all the money in the world."

"His strong and generous attachment to his old servant, Urbino," Mrs. Jameson⁹ writes, "reveals one of the very few amiable traits of his character." He had presented this faithful *attaché* of years standing, with two thousand crowns, so that in case of his own death, further service would be unnecessary for him. But the devoted Urbino died first, and the master tenderly nursed him through his illness, and was almost inconsolable at his death.

Michel Angelo's strong and devoted attachment in his later years for Vittoria Colonna⁸ forms a unique page in the world's history of friendships. This lady of noble birth, cultured, intellectual, and a poetess of no small renown, possessed a strong character, "and a morality as lofty as her beauty." More than any other one, she appreciated and understood Michel Angelo, her sympathy and judgment often serving as an inspiration to the artist in his work. A few detached remarks from one of his conversations with her will, perhaps, relieve his character a little from the charge of arrogance. He says: "A thousand silly reproaches are brought against artists of importance. They say they are strange people, that there is no bearing with them. It is true, painters have certain peculiarities, but how should an artist, absorbed in his work, take from it time and thought to drive away other people's *cunni*. I assure you, His Holiness himself often perplexes me, when he asks me why I do not oftener show myself. I believe I can be more useful to him by remaining at home than by appearing in the palace for every trifle."

Michel Angelo's poetry alone would have won for him no humble meed of praise. A few lines from a poem written on the death of his father, will give an idea of his style:

"Death is less hard to him who wearily
Bears back to God, a harvest fully ripe,
Than 'tis to him in full and freshest mind."

* * * * *
"And if 'twixt sire and son the noblest love
Still grows in heaven, where every virtue grows,
While giving glory to my heavenly Lord,
I shall rejoice with thee in heaven's bliss."

This man whose genius was so comprehensive in its grasp, by the unrelenting labors of ninety years, at length exhausted his giant powers, and lay down to die of worn out old age. On February 18, 1864, Michel Angelo breathed his last in Rome. His body was taken to Florence where it was buried with fitting honors, and a monument on which his bust was carved was erected over his grave. "We fancy the earth must pause a moment in its course when such a power is snatched away from it."

GALILEO.

On the same day in which Michel Angelo, bending low, passed out under the extreme western horizon of life, there entered it from the eastern side a babe, whose pathway across the world's arena was to be as distinctly marked. Galileo Galilei was born at Pisa. The talent early displayed by him induced his father to provide as carefully as his limited means would allow for his education. The remarkable versatility of genius displayed so often by the leading minds of those days, was possessed in an eminent degree by Galileo. He was an accomplished musician; in the arts of painting and drawing his attainments and judgment were held in high esteem; and his eloquence was such as to warrant those who predicted for him a brilliant literary career. His father designed him for the study of medicine, and at great personal sacrifice, sent him to the University of Pisa, where he was enrolled in the medical department.

One day during service in the cathedral, his attention was directed to the oscillations of a lamp, and there came to him the thought that the swinging of a pendulum might be used to indicate time. It was not until fifty years later, however,

that he applied this discovery to the construction of a clock. From the time he made this observation, he comprehended what the study of mathematics could do for him, and he bade farewell to all thought of medicine, greatly to his father's disappointment. In his twenty-fifth year, he was elected to the professorship of mathematics in the same university in which he had studied. From the very beginning of his duties, he set himself to disprove many of the doctrines then believed in regard to this science. By actual experiment he exploded the old theory that the velocity of falling bodies was proportional to their weight. From the top of the famous Leaning Tower he let fall bodies of unequal weight, and from the difference of time occupied in falling, as indicated by the noise made in striking, the beholders saw that their old-time rule did not hold good. And yet such was the intolerant bigotry of the age that these ocular demonstrations were made sufficient grounds for stirring up popular hatred against him, which was carried to such lengths that they entertained the thought of banishing him from their midst.

At this time there came to him from Padua, a request that he would accept the chair of mathematics in the university of that city, and very gladly he did so. His lectures in this institution soon gained such fame that great numbers crowded in to hear them, and it became necessary to set apart a large hall for his use.

Galileo's researches led him to adopt the Copernican system¹⁰ of the universe, which places the sun as a fixed body in the center with the planets revolving round it. The church of Rome most strenuously opposed this doctrine as being contradictory to the statements of the Bible. But Galileo studied on, and every new revelation only confirmed his opinion.

He shortly constructed the first telescope proper. He cannot rightfully be said to have invented it, though many claim for him this honor. He himself gives the following account of it in a letter to a friend, written in 1609: "You must know that about ten months ago I received information that a certain Dutchman¹¹ had presented to Count Maurice,¹² of Nassau, a glass manufactured in such a way as to make distant objects appear very near. * * * This seemed to me so marvelous that I began to think about it, * * * and how it was made. This at length I found out; and I have succeeded so well, that the one I have made is superior to the Dutch telescope." This first instrument magnified only three times; shortly he constructed one having a power of eight; and quickly following that, one of a power of thirty.

These telescopes he used in exploring the heavens, and the discoveries to which they led soon startled the world. Who can imagine what must have been the emotions of this great man's mind as he first gazed upon those wonders of the heavens which no man had ever seen before. He studied the moon with her "configuration strange;" saw the stars spread out in the "milky way;" discovered the satellites of Jupiter, and Saturn's ring; and beheld the reasonable theory of Copernicus, established as a fact. He published accounts of his discoveries, and these with his lectures soon roused again the old spirit of persecution against him. The church looked upon him with the greatest suspicion as a dangerous man who was giving license to free thought. All kinds of ridicule and arguments were brought against him. One day, from the sacred desk, a friar of the Dominican¹³ order addressed the astronomer and his adherents in the following manner: "Ye men of Galilee, why stand ye here looking up into heaven?" But this was thought, even by the church, to be sacrilegious, and the sarcastic speaker was publicly rebuked. One opponent argued that as there were only seven orifices in the head, seven days in the week, and seven metals, there could be only seven planets.

In 1610, at the invitation of the grand duke, Cosimo de' Medici, Galileo removed to Florence. Here, at one time, in defense of the Copernican system, he declared "that in Scripture there

were propositions which were false in the literal sense of the words; and that in all natural questions, philosophical argument should have more weight than mere Scriptural declaration." For this statement he was summoned before the Inquisition,¹⁴ and made to feel its power. His enemies failed to convict him of heresy, but he was forbidden henceforward to teach this system. This took place in 1616. In 1632, he published a book called "Dialogues on the Ptolemaic and Copernican Systems." The book was written in the form of conversations carried on by three persons, one of whom was a true philosopher of the new school; another who took a secondary part, and brought up doubts and difficulties which, as they were all met and settled, only more firmly established the questions in point; and the third, an obstinate follower of Aristotle. Urban VIII.¹⁵ was then pope, and he had been a firm friend to Galileo. He conceived the idea that this last character was meant to represent himself, and, from this time, took decided grounds against the astronomer. Galileo was soon again called before the great tribunal. He was charged with having failed to keep the injunction laid upon him by the church in his former trial, as the book was looked upon as teaching rank heresy, besides being blasphemous. Sentence was pronounced against him June 22, 1633. It prohibited his book, and placed him a prisoner in the hands of the Inquisition. They compelled him publicly to renounce his belief in these new and condemned doctrines. And now came the time in which the great stain was imprinted upon the name of Galileo. He lacked that nobility of soul and upright decision of character which alone can supply the heroism needed by the martyr. "Clothed in the sackcloth of a repentant criminal, the venerable sage fell on his knees before the assembled cardinals, and laying his hands upon the Holy Evangelists, he invoked the Divine aid in abjuring and detesting and vowing never again to teach the doctrine of the earth's motion and the sun's stability." Poor, frail, human nature! Physical fear pushed back the crown of moral greatness already to descend upon his brows, and so left him king only in the intellectual world. A dark scene it was which was enacted on the stage of history that day. Religion, in the guise of obstinate superstition, pinned fast around the clear-sighted, keen eyes of philosophy, consenting to the deed, the heavy, double bandage of tyranny and untruthfulness. What must have been the relief of those zealous, bigoted churchmen when they saw this formidable foe, who, as a mighty conqueror in the realm of philosophy, bade fair to dispossess Aristotle of his throne, and to lead his adherents as captives in a great triumphal procession, hoist the flag of truce at the outset, and surrender himself into their hands.

It cannot be proven that Galileo was subjected to torture, and the tradition that, on rising from his knees, he exclaimed under his breath, "It does move for all that," is to be greatly discredited. He passed the rest of his life under the watch-guard of the church. Remarkable leniency, however, was always shown him. Until December of that same year, he found a home in the palace of the archbishop, where he was treated in no respect as a prisoner, except that he was not allowed to leave the place, or to see anyone without permission. Then he was permitted to return to his own home in Arcetri, near Florence, but the same surveillance was kept over him there. He was permitted to carry on his studies, but he dare not trust himself henceforth, to any length, at least, in astronomy. The liberation of the moon¹⁶ was his last discovery in this field. He published after this time a book of "Dialogues on Local Motion." In 1637, his sight began to fail, and in a few months, he became totally blind. Shortly after this calamity, as if to fill his cup of suffering to the brim, deafness almost complete was added to his infirmities. From this time, more liberty was allowed him, and many distinguished men visited him, among whom was Milton. In his *Areopagitica*, he incidentally refers to this visit as follows: "I found and

visited the famous Galileo, grown old,—a prisoner to the Inquisition for thinking on astronomy otherwise than as the Dominican and Franciscan licensers thought."

In spite of all his physical ailments, his mind remained vigorous and clear, and he was constantly engaged at some literary work. In 1642, he was seized with an attack of fever which in a few days ended his life. Objections were at first brought forward against burying him in consecrated ground, but these were afterwards removed, and he was interred in an obscure corner in the church of Santa Croce in Florence. Not for thirty years, however, was it permitted to raise a monument over the spot, where slept "the starry Galileo, with his woes." Many traditions are preserved in the neighborhood of his home concerning him. A few years since a traveler finding himself near the tower of Galileo, in Arcetri, "asked a peasant who Galileo was, and received for answer a strong expression of surprise that he should not know who that arch-magician was, who, being blind, divined the stars!"

In character, he was amiable and genial, capable of forming strong attachments, and always having round him a large circle of friends. He was noted for his liberality to the poor, for hospitality, and for the generosity which led him to extend help of all kinds to men of genius. He was quick-tempered, and inclined to be sarcastic; and was impatient at any hesitancy in accepting his statements. Somewhat of the boastful spirit, and desire of display which animated the breasts of the old Roman warriors were exhibited by him.

Galileo's moral character bears some heavy blemishes. The mother of his three children was never made his wife. These children, however, were always lovingly cared for by him, and the death of one of the daughters, which occurred in his old age, was so severe a blow to him that he never recovered from it.

In a letter to Diodati, his friend, Galileo says: "I stayed five months at Siena, in the house of the archbishop; after which my prison was changed to confinement to my own house, a little villa one mile from Florence, with strict injunction that I was to entertain no friends, nor to allow the assembling of many friends at a time. Here I lived very peacefully, paying frequent visits to the neighboring convent, where I had two daughters who were nuns, and whom I loved most dearly; the elder in particular, who was a woman of exquisite mind, singular goodness, and most devotedly attached to me. She had suffered much from ill-health during my absence, and had paid no attention to herself. At length fever came on and she died after an illness of six days' duration, leaving me in deep affliction."

Galileo had one son who grew up idle and dissolute. His conduct greatly troubled the father, adding heavily to the trials already rapidly weighing him down.

In the list of his inventions are the thermometer and the microscope. He was the author of many works, besides those already alluded to, on the subjects of mechanics, astronomy, architecture, gnomonics, etc. Among scientists he must always stand as a leader, for it was he who dispelled the darkness which for so many long centuries had shrouded the fair field of knowledge.

Thus briefly have been given the sketches of a few of the illustrious men who rendered the times in which they lived noted for all future ages. From the great fields of literature, of moral reformation, statesmanship, the fine arts, and science, has one each been chosen. Each life is so intertwined with great events and so fraught with lessons of interest and instruction that so short a review must fail to do it justice.

After long centuries of war and bloodshed, Italy reached this brilliant period of its Renaissance only to be plunged again into a sad and stormy period. Then came, its desperate struggle for independence. Connected with this struggle appears again a brilliant cluster of famous names, brief accounts of which will be found in the readings on modern Italy.

ROMAN AND ITALIAN ART.

CHAPTER III.

ITALIAN SCULPTURE.

With the decline of the Roman empire came the decadence of Roman art. From excessive and strained effects art finally, with the removal of the seat of government to Constantinople, fell into apathy. The Roman existed longer only in name. The decadence of power, the threatenings of the barbarians, and interior embroilment stifled the artistic energies of the city. The new religion which was struggling into existence at this time, alone sought to put into practice something of the traditions of the past glory, but even it was fettered, particularly so in the domain of sculpture. The Christian religion followed an idolatrous worship. To the Greek and Roman gods which crowded Rome, there had been added Egyptian and Assyrian divinities. An endless variety of graven images was worshiped. Sculpture came to mean idolatry to the Christians; hence, while they were surrounded with the profusion of Pagan art which might have served for models, their religious scruples forbade them to use sculpture to any extent. We do find a few remains. The statue of St. Peter now in the main nave of St. Peter's, belongs to this period. There have been found in the catacombs and in the vaults in many of the Italian churches, also, sarcophagi, with more or less elaborate bas-reliefs upon them. Numberless small articles like lamps, jars, and glass vessels, have also been recovered from the old churches and vaults, all of which show considerable artistic merit. The most beautiful carvings are found on the ivory boxes, chairs, and altars.

The little artistic life in the church, however, soon declined. The dark ages had begun. Under the terror of foreign invasion, of foreign rule, and the stupefying effects of intellectual barrenness, the glimmering light of art which Christianity had tended, went out. It was not until the thirteenth century that it was again lighted.

At this period Italy began to revive. The effort to shake off German authority and to become self governing, developed new energies. Gothic influence from the north had its effects. Christianity began to realize her power. Now begins that marvelous period in the history of Europe known as the Renaissance.

A forerunner of the art awakening of this period in Italy, appeared in Nicola Pisano,¹ who was born in 1204. He became imbued with the spirit of ancient art. What influenced him or who was his teacher is unknown. He suddenly appears in the midst of crude, fantastic art with sculptures which, to this day, are counted among the master pieces of Italian art. The chief works which Nicola left are the door of a cathedral porch at Bologna in which he represents the descent from the cross, a sarcophagus of St. Dominic, at Bologna, covered with fine reliefs, a magnificent pulpit in the baptistery at Pisa, and another at Siena. The figures in these works are modeled, as we have said, after the antique. It will be noticed that Nicola's art was all applied to church decoration. Sculpture and painting were religion's handmaids.

This master had a son, Giovanni Pisano, who, as a sculptor, was inferior to his father, though he attained great celebrity as the designer of the Pisan Campo Santo. To be, like Giovanni, both an architect and sculptor was a very common thing at that time; indeed painting was generally included in the work of an artist.

Four years before the death of Nicola in 1280, there was born at a village about fourteen miles from Florence an artist destined to become the leading painter of the fourteenth century, and to introduce a method on which much of the best painting of succeeding ages was built. This was Giotto.

Greatest as a painter, yet sculpture also owes to him a decided impulse. Only one work in this art remains, but that is quite sufficient to explain his power. It is the bas reliefs of the campanile at Florence. The reliefs decorated the whole surface of the tower. The designs were all by the master, but only two were executed by him. The characteristic which Giotto introduced into his reliefs was simply fidelity to nature. He designed things as they actually are.² It seems never to have occurred to artists before this time that nature could be a teacher. The antique and Byzantine styles were all that they had followed. To copy nature was an innovation extraordinary. Around the Pisani and Giotto flocked artists from all parts of Italy. Most prominent of Giotto's co-laborers was Andrea Pisano who assisted in executing the sculptures Giotto designed for the campanile. Andrea, however, designed a work which brought him the reputation of being an original artist—the south door of the Florence baptistery. It is in bronze and is covered with twenty-eight panels. The designs are charmingly simple, being hardly more than outlines, and are executed in correct taste.

But one more name of prominence will be mentioned among the sculptors of the fourteenth century. It is that of Orcagna,³ great in all three of the arts, but most famous as a sculptor. His masterpiece is to be seen in the church of San Michele, at Florence. It is a pyramidal altar of white marble, decorated with mosaic work and reliefs of scenes from the life of the Virgin. Orcagna executed many more monumental works of rare beauty, but none so celebrated as this tabernacle of the high altar.

The fifteenth century opened. "A period," says Mrs. Jameson, "perhaps the most remarkable in the whole history of mankind." A work of sculpture gave the key-note for the artistic life of the century. This work was the bronze gate of Lorenzo Ghiberti.⁴

"So marvelously wrought,

That they might serve to be the gates of heaven!"

In 1401, the consuls of Florence decided that the baptistery must have a second gate of bronze. We have mentioned the gate of Andrea Pisano, which already hung in the baptistery. That it might equal Andrea's work and be, in short, the best achievement of which the sculptors of the time were capable, seven competitors were chosen and were allowed one year to complete trial designs. Ghiberti's work prevailed, and, in 1402, he began the execution. It was twenty-two years before the gate was finished and hung. So great was the admiration it excited that he was commissioned to execute a third gate for the baptistery. This composition excelled the first. The scenes were chosen from the Old Testament, and in conception, form, and execution, are of surpassing beauty. "Worthy to be the gates of Paradise," declared Michel Angelo. To Ghiberti are also attributed several statues to be seen in Florence, two bas-reliefs for the cathedral at Siena, and a fine sarcophagus of St. Zenobius in the cathedral at Florence. Among the competitors of Ghiberti was one to whom we must give mention, Donatello,⁵ whose works are famous for their strong naturalism which led him, at times, even into the grotesque. The statues of St. Mark and St. George on the front of the church of San Michele, in Florence are among his best known works. A great number of reliefs from him also exist. Donatello was very proud of his work, and it is told of him that he would sometimes break a statue rather than have it fall into the hands of a man who could not appreciate it. A follower of Donatello, was Andrea Verocchio.⁶ A beautiful equestrian statue by this sculptor stands before the church of San Giovanni at Venice. Luca della Robbia⁷ is another name

of power in this period. He introduced the use of terra cotta into the decorations of the period, and nearly every church in Tuscany has some of these delicately colored, chastely designed articles. Luca had a large following, and pulpits, altars, medallions and statues were executed in his chosen medium.

In the fifteenth century Leonardo da Vinci,⁸ a pupil of Verocchio, exerted a strong influence; but we have no work of this master left to study. Sansovino⁹ (1460-1529), also a Florentine, commands attention as one of the greatest designers of the century. Already the antique had begun to be largely studied, and it put an imprint upon Sansovino's designs, but did not corrupt them, as is the case of later sculptors. His work is characterized by beautiful, truthful conceptions, carried out in free, bold forms. Beautiful examples of Sansovino's work are to be seen in the churches of Rome, Genoa, and Florence, but there is none so interesting as the decorations of the Holy House of Loreto.¹⁰ His name descended to a celebrated pupil, Jacopo Tatti,¹¹ who worked at Venice mainly, and maintained a large school of sculptors.

Contemporary with Sansovino, and exerting, probably, a more powerful influence than it has befallen any master in any art to exert, was Michel Angelo. This giant in all arts was, before all else, a sculptor. It had been his fortune to study, in early life, in the gallery of Lorenzo the Magnificent, at Florence, a spot in which the finest of antiques had been gathered. He produced at this period, among other works, a Cupid, a Hercules, a Madonna mourning over the dead Christ, and a statue of Bacchus, which proved his power and won him attention. In 1503, he was commissioned to execute a tomb for Pope Julius II. The work was never completed, but famous sculptured figures intended for it were finished. Most powerful of all these is the Moses. Of all the remaining crowd of works by Michel Angelo none are more worthy than the monuments of the Medici at Florence.

Angelo's characteristics as a sculptor are remarkable naturalism, a perfect knowledge of the antique, familiarity with the structure of the human form, and an attempt to force the marble to express in full his idea. This last motive predominates in his work. Indeed, here he fell into his greatest errors. "For the sake of giving fullest possible expression to an idea, he is ready to trample on the laws of natural proportion." Michel Angelo had a large following in this century and the next, but most of his followers fell into errors by over-reaching, and frequently produced grotesque and extravagant works.

The seventeenth century produced few sculptors worthy to follow those of the past. Complex, intricate, showy works were attempted. Dignity, repose, and ease were lost. "An immense number of artists of talent, an immeasurable abundance of creative power and mechanical resources were swallowed up in this wasteful struggle; and the world was deluged with a countless host of showy, but meaningless works."

One name of prominence at this time is that of Lorenzo Bernini,¹² a sculptor of fertile imagination, but whose work was profuse and elaborate. Alessandro Algardi¹³ was a follower of Bernini in mistakes, though characterized by occasional strong pieces.

If we pass on into the eighteenth century, we find no one of particular merit until we reach Antonio Canova.¹⁴ A strong effort had been made by leading men of Italy to arouse a taste for the antique. Canova was the first to revive by his executions the purer styles of ancient art and of the Renaissance. He produced several tombs; among them, those of Pope Clement XIII., Clement XIV., Archduchess Christine, Alfieri, and Titian. Canova has been followed by a long list of sculptors in this century, leading among them are Tenerani, Bartolini, Vela, Finelli, and Fraccaroli.¹⁵

ITALIAN PAINTING.

The causes which prevented the cultivation of sculpture in Italy in the interval between the fall of Rome and the revival of the eighteenth century, apply equally well to painting. In

the early part of this period, we find a few attempts at decoration in the Catacombs, but they are very simple, being mainly representations of the symbols¹⁶ which the early Christians had adopted.

Later, mosaic painting was cultivated to a considerable extent, but in the Byzantine style which is intolerably stiff and manneristic. The subjects of the Byzantine mosaics are nearly always the Madonna and Child, with representations from the Bible. The general introduction of schools of this mosaic painting into Italy in the thirteenth century, undoubtedly had something to do with the awakening of a taste for artistic forms. The characteristics of these schools at this period, were briefly these: Perspective and proportion were unknown, the drawing was uniformly faulty, the coloring was done after the Byzantine models without any reference to nature. The first painter who improved at all upon these principles was Cimabue,¹⁷ a Florentine. Cimabue was a much more life-like painter than any of his contemporaries, and to him the founding of the FLORENTINE SCHOOL of painting is credited; but his name is greatest as the patron and teacher of Giotto, the real institutor of the Renaissance in Italian painting. Giotto di Bondone was taken by Cimabue as a pupil, when but a lad of twelve or fourteen years. His first work was in the council-chamber of Florence. In Santa Croce, at Florence, and in the Church of the Carmine he also painted compositions which gave him so great a name that Pope Boniface III. called him to Rome to execute mosaics for St. Peter's, and to paint. Of the former the *Navicella*¹⁸ still remains in the vestibule of St. Peter's. From Rome Giotto went to the church of St. Francis at Assisi¹⁹ where he produced a series of frescoes, and thence to Padua, in 1306, where he represented the times of the Virgin and of Christ in a similar series. So great was the reputation which these pictures gave him that he was called upon to paint in Milan, Lucca, Rimini, Ravenna, and in 1327, in Naples. Until his death, in 1336, Giotto painted in the various cities of Italy, and carried on his school at Florence. The changes which he introduced into painting were briefly these: Giotto sought his models in nature, and tried to imitate life. For groupings and arrangements he studied the ancient Greek art. "Beyond grace and beyond beauty, he aimed at the expression of natural character and emotion, in order to render intelligible his newly-invented scenes of action, and his religious allegories." This Florentine School, under Giotto, rose to great eminence and produced some remarkable artists. The innumerable works which Florence and other cities of Northern Italy possess and attribute to Giotto, were, no doubt, in many cases done by his pupils. Taddeo Gaddi,²⁰ was of the most faithful of his pupils, and many works formerly attributed to Giotto are now known to be by this artist.

Orcagna, though not a pupil of Giotto, belonged to this school, and executed some beautiful works for the Strozzi Chapel of Santa Maria Novella, in Florence. For many years the pictures of Death, Judgment, Hell, and Paradise, in the Campo Santo at Pisa, were ascribed to Orcagna, but later criticism disputes this. Orcagna improved upon the methods of Giotto in the arrangement of the figures, in greater freedom in the draperies, and in more natural expression.

Contemporary with the Florentine School of the fourteenth century was the SIENESE, headed by Duccio.²¹ It was the good fortune of Florence to find for her artists a historian, Vasari, who did justice to her. Siena had no such historian, and as a consequence, her painters are but little known. Duccio was undoubtedly quite the equal of Cimabue, though much less known of him. His master-piece, the altar-piece in the Cathedral at Siena, is still in existence, and by many is considered quite equal to Giotto's best works. Though somewhat fettered by Byzantine traditions, he was nevertheless strong in his conceptions, uniting thought and beauty in his pictures. Simone Memmi,²² the friend of Petrarch, followed Duccio at Siena. Memmi painted at Avignon while the popes had their seat

there. He executed works also, for various churches and public buildings, among the latter, for the Campo Santo. A Madonna by Memmi is to be seen in the Cathedral at Siena, while in the Berlin Museum two are found. Another Sienese artist, Lorenzetti,²⁸ also did some good work in the town hall of Siena.

Although schools of painting existed in the fourteenth century in other cities of Italy they were all more or less mediocre. With the opening of the fifteenth century the Florentine School still was at the head of Italian painting. A Florentine master of the first quarter of this century was Masaccio,²⁹ or *Ugely Tom* as he was called from his slovenly habits. Masaccio learned his knowledge of form and drawing from the sculptors Ghiberti and Donatello and of perspective from Brunellesco. He was a diligent student also of nature, advancing farther than any one before him in grouping and in managing light and shade and relief. The Naturalistic School of Florence was founded by Masaccio. Such painters as Michel Angelo, Leonardo, and Raphael studied his works and acknowledged his power. Among his master pieces is a series of frescoes in the church of the Carmine at Florence. A contemporary of Masaccio was the monk Guido di Pietro, or Fra Angelico,³⁰ as he was called from his saintly life and spiritual conceptions. Angelico painted a series of frescoes in the convent of San Marco at Florence, and afterwards decorated a chapel in the Vatican. His work was a religious duty for him. It is said that he never took up his brush without uttering a prayer, and that he never altered anything, believing that his work was done by divine inspiration. He surpassed all his contemporaries in the religious fervor which he threw into his Madonnas and saints, though his style lacked vigor and correct drawing. The only pupil of Angelico's who in any way preserved the tradition of his master was Benozzo Gozzoli³¹ who, in the early part of his life, painted much like Angelico, but, coming under the influence of Masaccio, he took a more realistic style. Gozzoli's most famous work was done in the Campo Santo at Pisa where he painted twenty-four frescoes, a series that required seven years for completion. These pictures are, for the most part, still in a state of good preservation. Several sets of pictures also exist in different churches of northern Italy, executed by Gozzoli.

Another painter of this period was Fra Filippo Lippi³² (1400-1496). He was a man of profligate habits, but his genius caused his vices to be overlooked. Filippo painted in the style of Masaccio, under whose influence he had early come, but he improved upon the master's naturalism. His grouping is superior, and his light and shade better. Filippo was one of the first of the Italian painters to use oil.

The last of the Florentine masters of the fifteenth century whom we shall mention is Ghirlandaio, the teacher of Michel Angelo. Ghirlandaio has been called the "intellectual heir of Masaccio." Into his frescoes, the chief of which were done in the Sistine chapel, in Santa Trinita, and the choir of Santa Maria Novella, in Florence, he introduced large numbers of his contemporaries as spectators of the religious scenes which he painted. His work was characterized by freedom of style, skill in drawing, and beauty in grouping, though he failed of the religious feeling seen in earlier artists.

The Florentine masters of the sixteenth century carried painting to its highest technical perfection and surpassed all others in daring conceptions. Leonardo da Vinci, in whom we find "a résumé of all the characteristics of the age in which he lived," is the first master of this period. He was a pupil of Andrea Verocchio, the sculptor. Forcible and dramatic in conception, a master of technique, color, and *chiaroscuro*,³³ he produced one of the most famous master-pieces of the world, the Last Supper, in Milan. Leonardo had many pupils and exercised a wide influence outside of his school. Fra Bartolomeo³⁴ is one of the greatest masters of the latter class. This deeply religious monk, a follower of Savonarola and friend of

Raphael, has left us a beautiful conception of the Madonna, in the Madonna della Misericordia, at Lucca. The invention of the lay-figure is ascribed to Fra Bartolomeo. With Da Vinci must also go the name of Andrea del Sarto³⁵ (1487-1531), the best colorist we have among Florentines of this period.

The greatest master of the sixteenth century was Michel Angelo. The magnificent works by which he is best known are the Cartoon of Pisa, the cartoons for the Sistine chapel, his Conversion of St. Paul, and the Crucifixion of St. Peter. These pieces are all in fresco, oil painting being despised by him. The influence of his great conceptions was unprecedented. In daring conceptions, powerful expressions, proud effects he was unrivalled, but the very daring of his style proved a stumbling block to lesser artists. No one had the genius to follow the master in his flights, and in their attempts to do so debased art by unnatural strained effects.

The PADUAN SCHOOL, established about the middle of the fifteenth century by Francesco Squarcione,³⁶ was founded on the study of the antique. The most distinguished of the pupils of this school was Andrea Mantegna,³⁷ who also gained much knowledge of form by studying under Donatello. His paintings were graceful in design, and the coloring excellent. Mantegna had a large following of scholars and imitators. He was connected by marriage with the Bellini,³⁸ the earliest masters of the VENETIAN SCHOOL, and probably learned from them his perfection in coloring. Giovanni Bellini had learned the art of oil-painting,³⁹ and practiced it with wonderful success. He painted an immense number of works, most of which are to be seen in Venice. One of the finest is an altar-piece in the sacristy of San Zaccaria, at Venice. His compositions are simple, the coloring, and light, and shade are exquisite, and the heads remarkably beautiful. He is said to have introduced portrait painting into Venice. Giovanni had a brother, Gentile, who worked with him, and a large number of pupils, the most famous of whom were Giorgione and Titian.⁴⁰ The former, numbered among sixteenth century painters, had had the advantage of studying from Leonardo da Vinci, from whom he received an accurate knowledge of form, and freedom of style. His coloring is rich and harmonious. Giorgione's subjects were scriptural, but painting had begun to be put to other uses by this time, and he decorated the exterior of buildings, painted historical pictures, and magnificent portraits.

Titian, the contemporary of Giorgione, has left the name of the greatest colorist among Italian painters. His powerful mind seemed to grasp the excellencies of all the various schools, and he produced an immense variety of works of eminent merit. Among them are devotional pieces, a famous example being Christ with the Tribute Money, now in Dresden, mythological pictures of rare beauty, and a great range of portraits including the greatest men and fairest women of the day. By the time that Titian died, 1576, the great artists of Italy had all passed away. The Venetian school alone retained a reputation for original merit. This reputation was sustained chiefly by Tintoretto, (1518-1594), and Paolo Veronese.⁴¹ The former was a pupil of Titian in early life. He had two ambitions inscribed as a motto on his studio wall—to color like Titian, and draw like Michel Angelo. Eager and impassioned in his work he painted much that was superior, though sometimes falling below his own level. Venice contains many of his works.

Paolo Veronese, whose masterpiece, the Marriage at Cana, is now in the Louvre, attained a great reputation in Venice as an original colorist.

Italian painting had in the UMBRIAN SCHOOL another powerful division. This school rose to eminence with Perugino,⁴² (1446-1524), a pupil of Andrea Verocchio, a comrade of Leonardo, and the teacher of Raphael Santi.⁴³ Perugino was one of the early decorators of the Sistine chapel. His pictures, all of them on religious subjects, are marked by a deeply devotional spirit, and high grade of technical skill, though fre-

quently marred by mannerisms. The sweetness and serenity of his compositions especially influenced the greatest of his pupils, and, perhaps, the greatest painter of all time, Raphael Santi. Raphael, however, added to Perugino's style the combined merits of Masaccio, Leonardo, and Michel Angelo. Indeed, "the thing that is most worthy of admiration in Raphael is a certain harmonious combination of all intellectual endowments; such as is but rarely seen even in the greatest artists." Among his works we can only mention his beautiful Madonnas and Holy Families, the Betrothal of the Virgin, the paintings in the *stanze* of the Vatican, the cartoons for the tapestries of the Sistine chapel, and the decorations in the *loggie* of the Vatican.

The LOMBARD SCHOOL remains to be touched upon. Its great master was Correggio,³⁹ (1494-1534), whose principal works are found at Parma. Correggio's great characteristic was harmony, his gradations of color were perfect, his figures graceful, the grouping always appropriate. He added to this effect by invariably painting in *chiaroscuro*. After Correggio, the chief master of the Lombard School was Parmigiano,⁴⁰ the artist whom the Italian poet bids us study if we would learn grace in painting.

"How to paint well who doth desire to know
Careful design will study well at Rome.
From Venice breadth of light and shadow come.
Of Lombard colouring mark the noble glow;

End of Required Reading for December.

Then tread the awful path of Angelo.
See Titian's nature every eye beguile,
Correggio's chastening and imperial style.
The matchless symmetry of Raffaello,
Tibaldi's⁴¹ grave decorum and his ground;
In Primaticcio⁴² learned invention trace,
From Parmigianino steal a little grace."

The close of the sixteenth century saw a general decline in art. Mannerists existed everywhere. To copy well a great master became the sign of an artist's power. A reaction was started by the Carracci⁴³ at the close of the century in the ECLECTIC SCHOOL, a school which sought to unite the excellencies of all the great masters. The two Carracci succeeded in improving the technical work of artists, but their school was devoid of any very great results. Guido Reni⁴⁴ was one of their best pupils. A favorite picture of this artist is the portrait said to be of Beatrice Cenci, in the Barberini Palace, Florence. Domenichino,⁴⁵ also, is ranked high in this school. The Last Communion of St. Jerome, in the Vatican, is his best work. Side by side with the Eclectics were the Naturalists, who professed to find inspiration in nature alone. Caravaggio, Spagnoletto, and Salvator Rosa,⁴⁶ are the best representatives. Many other artists arose in each of these schools during the seventeenth and eighteenth centuries, but none are worthy particular mention. Before the close of the eighteenth century the art of painting had disappeared from Italy.

THE SEVEN GREAT ORATORS OF THE WORLD.

BY DR. A. A. LIVERMORE.

The Memorial Hall of Harvard University, at Cambridge, stands in the old delta, or triangular campus, where fifty years ago, the students of that institution bruised one another's shins at foot-ball. This majestic pile consists of three parts: the Memorial Hall proper, constituting the cross-piece of the cruciform building; the Dining Hall, the bottom of the upright; and Saunder's Theatre, named after the generous donor, Mr. Saunders, the head. The Memorial Hall contains one hundred and thirty-three white marble tablets, recording the honored names of as many members of some department of the university,—undergraduate, law, medicine, divinity, or science,—who gave their lives to their country, that she might live, though they died. The dining hall is the refectory of the institution, and there the great alumni dinners are given, while oratory, wit, and poetry hold the hour in the presence of the great and noble of the land. Saunder's Theatre, in the Latin sense *theatrum*, is devoted to the exercises on commencement, and Phi Beta Kappa days; to concerts and plays in term-time; and to state occasions of unusual interest. This portion of the building is semi-circular in form, with a roof terminating below in seven gothic arches, in each of which arches is a colossal bust, cut in grey sand-stone, of some celebrated orator.

And who are the orators who have been chosen for this high honor? They are Demosthenes, the Greek; Cicero, the Roman; Chrysostom, the Byzantine; Bossuet, the Frenchman; Chatham and Burke, the British; and Webster, the American.

The selection on the whole is a good one. The object seems to have been not only to choose great speakers, but great men, great geniuses, men of weight and power. As elocutionists, men who produced great effects, chiefly by their delivery; quite a different class might have been held up to the gaze of admiring collegians. Peter, the Hermit, Whitefield, Edward Irving, Mirabeau, Summerfield, and Prentiss, to speak of no others, produced great immediate impression on their hearers, and kindled their audiences to intense enthusiasm. But

for majestic thought, as well as commanding speech, another class must be sought, and they were found in the above list.

But we have one fault to find. Germany was entitled to a place in this roll of honor, and that place should have been given to Luther. If one Catholic orator, Bossuet, was exalted to the place, it was no more than right and just to enroll the mighty Protestant reformer, great in word and deed above all the men of his time, and challenging for eloquence and weighty thought and world-wide influence the men of all time. Either Chatham or Burke would not have thought it beneath their dignity, if living, to give place to the leader of the Protestant Reformation. For if, as some say, eloquence is to be tested by its effects, who better than Luther could vindicate a lofty claim? Besides, Bossuet was chosen, perhaps, quite as much for his ability in affairs, and his influence as a great counselor and bishop of the church, as for his oratory, for in that particular, Bourdaloue might assert a higher place than Bossuet. Considering, too, that Great Britain has not been a country especially distinguished for oratory, to make her the recipient of two honors out of the seven of the world, is hardly even-handed justice. It is questionable, too, whether the younger Pitt was not to be preferred on the whole for power of principles and weight of affairs to the elder, who, though of grander personality, and more commanding elocution, ran a limited circle of ideas. Burke was of so dull a delivery that he emptied the benches of parliament when he rose to speak, though his orations, when read, are full of power, and moral and political wisdom. One of these should have made way for Luther as a representative Teuton, and one of the greatest orators who ever stirred the breasts of men.

There are some lessons to be learned from the history of these orators of the world, which those who aim at the highest and best things in public speech, may well lay to heart.

1. Oratory, like every thing else, has its price, and the question is whether the aspirant has made up his mind to pay the

price. That price is *discipline, study, ceaseless practice. Nulla dies sine linea.* How untiring was the culture of voice and style of Demosthenes! How laborious the education of Cicero! How incessant the toil and practice of Chrysostom! And so down the line of history. "What a man soweth, that shall he also reap," is as true of oratory as of morals or religion. And the forum, the pulpit, and the bar, attest the same truth to-day. *Orator fit*, whatever we may say of *nascitur poeta*. No commanding, long-reigning, and wide-influencing speaker can be named, who has not been the child of discipline. The kingdom of oratory, like that of heaven, is taken by violence.

2. A noble cause of country or mankind, of mortal peril or immortal hope, has had a magic power to loose the tongue of the orator, and set his logic on fire. Allying himself to some great principle, the strength and inspiration of that truth seemed to pass into him, and made him its living incarnation. So it was that Lincoln, in the supreme moment of his life, became the genius of his country, and uttered in a few simple but sublime words, the appropriate eulogy over the dead heroes of Gettysburg. But the pulpit orator has a subject every Sunday, fitted to arouse the whole enthusiasm of his nature, and to call forth all his latent powers of mind and heart, of body and soul. His weapon is truth, his audience immortal souls, his aim their salvation, his motive the love of souls, his witnesses God, and Christ, and the angelic host.

3. But the orator, says Cicero, must be a *good man*. Never were truer words uttered. As the true poet must be his own poem, so the true orator must be his own oration. His character must be greater than his speech, if he would win the brightest meed of honor. A bad man's words undo themselves as fast as he utters them. He weaves no web that does not unravel as fast as it is woven. Sincerity makes every word weigh a pound, and every paragraph a ton. "Moveth one, moveth all." It is only when the whole man is devoted to the work in hand, and no part of the price is kept back, that great usefulness can be achieved. All the faculties of man act one upon another. An abnormal working of one maladjusts the whole machinery. Holiness is but another name for the wholeness of human nature, mental, moral, and physical, in its operation, and the perfect harmony and due subordination of every part, each in its place, and all together, devoted to some worthy end. So the orator reaches his ultimate perfection and power when he is a holy, whole man, no faculty holding back, none warring with the others, no screw loose or ajar in all the spiritual machinery.

4. A remarkable feature of the great orator's experience, is

the enjoyment he takes in the exercise of his noble vocation. As George Herbert says of the country parson, that "the pulpit is his joy and throne," so was the forum to the mighty men of antiquity. There were giants in those days, and they exulted in their strength. The "action," of which Demosthenes thrice spoke as the highest attribute of the orator, was the salient and rejoicing energy of the whole man, brought into the highest state of efficiency, and devoted to some grand end. We do well what we like to do, and we like to do what we do well. There is a lyrical and exultant joy in all right and harmonious use of well-trained powers. If our faculties have to be whipped up to their exercise, we may be certain that we have not yet got the clew to intellectual and moral pursuits. Our education has been in some way unfortunate. So, too, the joy of the speaker becomes a joy to the hearer. We hear with pleasure the orator who rises on his "winged words" with ease and grace, and glows with the enthusiasm of his theme, as he accomplishes some great purpose of heroism, patriotism, or religion.

5. And, finally, we are taught by this brief and rapid historic survey that *every age and every country may have its orators*. The rare gift of eloquent speech has had its representatives in all languages and tribes. The rude Indian has displayed it in the councils of his sages and chiefs. The most refined nations have not outgrown the charm of oratory. The rudest dialects have been melted down and made to flow in channels of harmonious and inspiring eloquence. And Greece was not too polished, nor Rome too warlike, nor England too commercial, nor France too light-hearted, nor America too rude to miss this exquisite delight of the golden-tongued orator. What has been, will be. New interests will hold men's attention, new causes will convulse the passions of nations, the great games of ambition and glory will be played on the stage of action, but Websters and Ciceros will still arise to fire the heart of great peoples with the zeal and enthusiasm of liberty and patriotism. There will still be the solemn calls of religious duty and destiny to summon new Chrysostoms and Whitefields into the service of the church, new Luthers and Bourdaloues to sound in the ears of an apostate generation the solemn commandments of Almighty God. It will be a glorious sphere for the future youths of the church, the forum, the bar, the legislature, to emulate the great leaders of the race in this important department of thought and action. But Orations for the Crown can only be achieved by those who, like the Demosthenes of old, pay the costly price for the brilliant meed of honor by discipline, self control, and a boundless enthusiasm for their art.

WINTER LAKE AND RIVER SPORTS.

BY GEORGE ALFRED TOWNSEND.

Attention has been called for several years back to the infatuating character of Canadian winter sports. Well-to-do Americans from large cities like Boston and New York suffer much in spirits from the monotony of our late winter and spring climate, and many thousand of these have no especial joy in the flat southern country, while they are indisposed to cross the Atlantic ocean in mid-winter or during the tempestuous spring months. Hence Ottawa, Montreal, Toronto, and Quebec have been receiving a goodly contingent of American visitors for years past, who enjoy the sledging, skating, curling, and other provincial games which have been modeled upon the amusements of the Scotch and provincial French, or in some cases invented to suit the character of the people and their country.

Montreal is probably the chief resort in Canada for Americans, because of the increased railroad facilities thither, and

the considerable hotel accommodation. That city, being on the north bank of the river St. Lawrence, was made accessible in the first place by the Victoria bridge which was opened in 1860 at a cost of \$6,300,000, and which consumed about five years in building. It is an essential, also, of these winter amusements, that they be attended by large numbers of people; and there is no city in Canada but Montreal which can pour out an interesting multitude. At present it has something like one hundred and fifty thousand inhabitants, while Ottawa has hardly more than twenty thousand, and St. John, probably, forty thousand.

When the Earl and Countess of Dufferin landed in Canada thirteen years ago, and when at Quebec they mingled with five thousand spectators at the Stadacona games, the earl said: "Our beloved sovereign seldom allows an occasion to pass without showing her interest in the sports and amusements of her people. I am sure we must all feel gratified at the way in which

the games of the day have gone off. It has seldom been my good fortune to be present at so large a gathering, to witness such extraordinary good behavior, mutual courtesy, and good humor; and I reiterate the desire that the present celebration may be the inauguration of the institution of annual games here." During the following winter a skating ball in the rink, and a curling match in the same building greatly delighted the earl and countess, and during twenty-five days' stay in Montreal, Lord Dufferin went every few days to the skating rink and mixed in unrestrained freedom with the frequenters there. Both himself and wife put on snow shoes with the citizens at large, and they had a magnificent parade by torch-light, every snow-shoe organization in the city joining.

Some description of the games of Canada, which are slowly creeping into the United States, may inform the reader.

CURLING,

like the game of golf, is of Scotch origin and is played in the bay of New York, and on the river Schuylkill at Philadelphia, as well as in Canada. The best situations for it are frozen lakes and rivers, but these not being convenient to some populous places, artificial, shallow ponds are created, for curling is as natural to the older generation of Scotch as base-ball is to the new generation of American boys. A series of curling matches is called bonspiels, and the whole spirit of the societies is aroused in them. They are governed by national rules issued by the Caledonian Curling Club, the master of the game. The region of Robert Burns, in south-western Scotland, is especially strong in curling. The game is played with flattish round stones carefully shaped by stone hewers, and approaching a foot in diameter, each stone weighing in the region of forty pounds. Each player has a pair of these formidable stones, and on the stones are handles by which they are held and hurled along the ice with that mixture of strength and calculation necessary. The game is frequently played with four persons against four, each side having its chief or foreman who is called the skip; a space of ice is measured out some nine feet wide by forty feet long, and this is called the rink. Near each end of this marked out space, rings are made in the ice something like a target, and in the middle is a very small ring or centre called the tee; the outer rings are called boroughs. A middle line runs across the narrow play-ground, and some twelve yards on each side of it toward the ends is another mark called the hog score. Any player who fails to drive his ball to the most distant hog score, which is something like one hundred feet distant, has his stone put aside and not counted. The purpose of the game is for the players to lodge their stones as near to the centre of the circle at the tee as possible. A succeeding rival player attempts to drive a successful stone out of its place. A succeeding friendly player would endeavor to lodge his stone so as to spare the well put stone of his partner. About thirty-one points constitute this game, and it will be seen that it somewhat resembles the game played upon the smooth decks of our ocean steamers, called deck billiards. Deck billiards, indeed, is an inference or deduction from curling. With the people crowded around upon the ice, or upon the banks, or upon platforms raised to view the spectacle, the strong players in the keen winter air show an exertion and an intensity in the game seldom found in any amusement.

A series of articles on curling and kindred subjects appeared during the present year in one of the English periodicals, and there are other indications that these northern games are making their way southward and covering any tract or territory adapted for their use, thus relieving in-door life in winter of its monotony, and bringing the people together under the gray skies to keep their blood warm by endeavor. Scotchmen generally hate mild winters, and they are not friendly to snow, which encourages rowdiness in the small boys, and blocks the roads and railways, and smotheres the sheep. The Scotch sleigh but little and know hardly anything about tobogganing. Everybody in Scotland, however, with the capital to buy a

pair of curling stones, embarks in that endowment like an American boy investing in skates or a sled. The south of Scotland meets the north of Scotland annually in Perthshire, where ponds have been made for curling; and in this game there is more true democracy than in anything else in the British Islands, because in the nature of the sport there can be no test of capacity but the actual game, and the master of many tenants comes down among them to try his hand. The farmer may find his chief competitor in his own laborer, and the shop-keeper may get the best of all the country-side. The excitement of the game soon sends the blood up to the tingling point; the school-master wholly forgets in this game his absorbing books, and the clergy feel that curling is as simple and severe an amusement as croquet, without the accompanying sensation of babyishness. Smooth ice is an important requisite in curling. The game is especially adapted to competition among neighbors, and abroad one parish always challenges the next one to a curling match in a strong, bright winter. Sometimes there are five players on each side, and they are invariably selected for their skill, without the least reference to their social standing; sometimes the person called the skip, or boss, is taken from the other four or five with a little incidental reference to his standing, or courtesy, or good judgment. Blacksmiths and men from the iron mills, with strong muscles in the arms, and broad backs, make excellent curlers. The stones they play with look like small flat cheeses, and the handles put into them are made of wood because cold metal would be too severe for the fingers of the most hardy players. The first player on each side who opens the game, aims to pass the hog score and allow his stone to be a little way within it. The next player on the rival side endeavors to knock the stone out, and at the same time check his own. The third player, friendly to number one, seeks to guard the first stone, if it is well-fixed and has held its position, and also, to plant himself advantageously. In this way it often happens that a well-placed stone is guarded at every side by the succeeding stones from the friendly side, and it is fortified like a citadel by outer batteries. This situation is the delight of an accomplished curling player, who rebounds, or caroms upon these different stones so as to drive one to the left and another to the right, and arrest his stone finally against the enemy. They call these movements inwicks or outwicks. A very fine player can deliver one of these large stones which weigh as much as a bucket of water, perhaps, with a twist of the wrist so that it will go in a kind of curved line and insinuate itself among the other stones as if it had human intelligence. Perhaps this gives the name of curling to the game, for the stone thrown by the expert, curls its way into the centre of affairs as if it had tactics in its cold interior. When a player thus plucks victory from defeat, and lodges his stone notably, the excited shouts of the by-standers assist to give the game its joy and fierceness, and the Scotch are known to rush up and slap their lucky brother on the back as if they meant to break his spine. This almost terrific excitement attends a fine match of curling from the beginning to the end, and the ladies looking on, and all the urchins, and even the professional men and the divines lose their calmness and dignity in the close interest of the winter competition. The players generally have a little sort of brush, broom, or wisp, on which they put their foot when they throw the stone, to get a good perch, and with the same device they sweep the ice, and sometimes another player will run along with the stone and sweep its path beforehand to give it more ingress or inwick.

GOLF.

Although the game of golf is not an ice game, still it can be played upon the ice, and my recollection of twenty years ago is that there never was any game of shinney played on solid ground to compare with shinney fought out upon the ice. The ball would go to great distances, but the players on their skates with crook stick in hand, went relatively as fast, and when the

ball was being driven toward the goal, and every player of each side was exerting his legs and arms to get up and stop the ball or propel it onward, the hilarity exceeded that of any base-ball game. It is said that the Dutch taught this game to the Scotch, and the Dutch named it *kolf*, which is their word for the club used to strike the ball. From Scotland this game has passed into all the British colonies. They play it generally on downs or links,—that is to say a stretch of sandy country with short grass upon it, and with open places, such as hills and mounds, to prevent the ball going too far. A circuit is made, something like a base-ball course, with holes four or five hundred yards apart, dug in the ground. Either two or four play on each side, and the ball is struck by each player on his side alternately. The golf ball is of gutta-percha and painted white, and the golf club is a spliced instrument with a shaft of hickory covered with leather, and a head, or crook, made heavy with lead inserted, and its face covered with horn, while the wood beneath is of thorn or apple tree. They play this game with a set of clubs, as good billiard players have their rack of cues. The ball has to be struck where it lies, except after it has been holed, when they can tee it, that is to say, set it up on a little heap of ground or sand. Half a dozen clubs are owned by each player, though of course they are not all necessary. Indeed, some players have ten clubs, and they call them by different names, such as the play club, the long spoon, the short spoon, the sand iron, etc. An assistant to the player is called the caddy, probably the basis of the word "cad," for this individual carries the other's clubs, and sets his balls up for him to strike when they are teed. Starting from the first hole in the circle of holes, the player attempts to drive his ball into the next hole with as few hits as possible, and so to go around the course most expeditiously. That player has beaten the other, who has put his ball in the hole with the fewest strokes, and has continued from hole to hole, until he has got back to the base. Hence, he requires these different golf clubs to suit especial emergencies. The hole into which the ball must go is not wider than the leaf of a book, and corresponds to a deep saucer made in the ground. This can be made in ice also, with some adjustment of the ball to the changed conditions. It is said that no person ever becomes very expert in golf unless he began it in his youth. Strong players can drive the ball great distances, while steady and careful players can work for the short hits. The walking in this game is one of its benefits for the ball has to be followed up by the player in his round, and walking on the exposed ground from irregular point to point, gives an activity not found on brick pavements. The professional golf players often wear a uniform, and in Scotland, and even in Canada there are professional players of this game who make their living by it, like our most notable base-ball players, and who instruct others for money. When the ice is not in good condition for curling, golf can be played on the ground close at hand; and no season is a barrier to this amusement. Probably not one American reader out of a hundred has ever taken an interest in these games which will not be long in finding their way through our Northern States.

LA CROSSE.

We now come to *la crosse*, whose avant players are not infrequently seen in our country seeking some rival organization to challenge. Montreal is the very center of this enjoyment, but the game has such an antiquity that it has given name to inhabited places even in our own country. At Montreal is a regular ground of the *la crosse* club, for this is considered the national game of Canada, as the Indians taught it to the Europeans. During the conspiracy of Pontiac this game was used by the Indians at the gate of one of the important forts, to enable them to seize the citadel, a matter worthy of a diversion at this point. Mr. Francis Parkman thus describes the scene which happened when General Washington was but thirty-two years of age, and while the American colonies were

in the fresh delight of having absorbed hostile Canada into their own dominion: "Early in the morning at Fort Michillimackinac, many Ojibwas came to the fort inviting officers and soldiers to come out and see a grand game of ball which was to be played between their nation and the Sacs. In consequence, the place was soon deserted by half its tenants. The gates were wide open, and soldiers collected in groups under the shadow of the palisades, watching the Indian ball play. The officers stood near the gate, indulging their inveterate English propensity to bet on one side or the other. Indian chiefs and warriors were also among the squaws, Canadians, and other spectators, intent apparently on watching the game, but with thoughts in fact far otherwise employed. This game, called *baggattaway* by the Ojibwas, is still, as it always has been, a favorite with many Indian tribes. At either extremity of the ground, a tall post was planted marking the stations of the rival parties. The object of each was to defend its own post and drive the ball to that of its adversary. Hundreds of lithe and agile figures were leaping and bounding upon the plain. Each was nearly naked, his loose, black hair flying in the wind, and each bore in his hand a bat of a form peculiar to this game. At one moment the whole were crowded together, a dense throng of combatants, all struggling for the ball; at the next they were scattered again and running over the ground like hounds in full cry. Each in his excitement yelled and shouted at the height of his voice. Rushing and striking, tripping their adversary or hurling him to the ground, they pursued the animated contest amid the laughter and applause of the spectators. Suddenly from the midst of the multitude the ball soared into the air and, descending in a wide curve, fell near the pickets of the fort. This was no chance stroke; it was part of a preconcerted stratagem to insure the surprise and destruction of the garrison. As if in pursuit of the ball the players turned and came rushing, a maddened and tumultuous throng, toward the gate. In a moment they had reached it. The amazed English had no time to think or act. The shrill cries of the ball players were changed to the furious war whoop; the warriors snatched from the squaws the hatchets which the latter with this design had concealed beneath their blankets. Some of the Indians assailed the spectators without, while others rushed into the fort, and all was carnage and confusion. Within the area of the fort the men were slaughtered without mercy."

Among the descendants of the Canadian French and of their half breed kinsmen, *la crosse* has been nurtured steadily, and in Montreal are nine *la crosse* clubs. They have two important grounds in Montreal. They practice in the early morning, and generally play their matches on Saturday afternoons.

La crosse has a general identification with the foot-ball class of games. The *la crosse* ball is about the size of a boy's trap ball or a billiard ball, and is made of solid India rubber. It is not exactly struck through the air, but caught in a loosely strung bat, and thrown out of it forward or backward; the human hand must not touch the ball at all in forcing it or receiving it. While the two sticks or goals are put up at each end of the course, the game, nevertheless, continues on and about these goals. The players wear long stockings, sometimes knee breeches, and close-fitting suits like Jerseys. The players meet at the middle of the field, facing one another. They make eleven files like two skirmish lines, where a competitor on each side faces the opposite one. Every station has its name like the names conferred upon fielders, etc., in base-ball. The two central adversaries begin with their bats to the level of the ground, crossed. An umpire puts the ball between them, and it is at once in play. From either side the assistants come in, each with his bat, and this game is played a good deal with the wrist and forearm by sleight and dexterity, for the player can take the ball on his bat and run with it, and then the opponents run after him, and he attempts to

run to the enemy's goal with the ball and the bat, and they rush for him to force him to let it loose. When he is caught you can hear the bats clash against each other, and finally, the ball darts out, and some one, with a strong stroke, sends it away, and then the whole mass of players rush to where it has gone. The center of excitement shifts at every moment. Nothing counts but a goal, and the ball has to be thrown, not carried there, and if the ball should slip outside of the prescribed bounds, the game goes on beyond the goal. Whoever can put the ball through, scores a point on the game, and three points or games win the match.

TOBOGGANING.

The toboggan is an Indian instrument, as *la crosse* was an Indian game. In Montreal are four toboggan clubs admitting members by ballot, and each keeping its own distinctive club badges. The hill on which the toboggan or long sled glides, is sometimes artificially erected, at least, at the summit, so as to give initial velocity. The crown of the hill is about thirty feet square, and covered with ice. The Indians walked on snow shoes upon the surface of the snow, and drew the toboggan after them, which was loaded with their game or effects or with their children. At present the snow shoe makes a distinctive instrument of amusement. As the Americans in spring and fall have walking matches to distant rural parts, ladies and gentlemen uniting for exercise and sociability, so the Canadians, men and women, practice walking on snow shoes. There are several clubs of this kind in Montreal, and on one occasion only a year ago, at a carnival, they numbered two thousand men; and this great line carrying torches tramped over the Royal Mount behind the city, which gives Montreal its name. At the same time an ice palace was erected out of which this procession started.

At the falls of Montmorenci in the outskirts of Quebec, the winter frost produces two cones out of the mist which comes down the cascade, the latter being two hundred feet high, or some forty feet higher than Niagara Falls. The small cone is given up to the ladies, and is seventy-five feet high, while the gentlemen's cone is about one hundred and fifty feet high. Steps are cut in the frosty sides of these cones, and boys are at hand, who can be hired to take the sleds up again. Here the sled is often the common *traineau*, and the boy who owns it takes the front seat, and behind him sits his employer or guest. The boy guides the instrument, and there being a river of frozen ice at the foot of the cone the sled sometimes goes a whole mile, and the boy hauls the visitor back.

The toboggan, or tobogan, is made of light wood, generally birch bark, and is about a foot and a half wide, sometimes two feet, and its extreme length is about eight feet, though it is sometimes only four feet long. The piece of wood is bent upward to make a runner, and braced, and being thus flat, light, and broad, it goes admirably over any frozen surface. A cushion is laid on the toboggan, and about three persons get on it, tucking their legs up in front, tailor fashion, and the steersman is behind resting on his left knee and using his right leg for a rudder. A speed of thirty miles per hour is attained by this article; sometimes the toboggan is guided by a piece of stick, and in that case the steersman sits in front. Delicate steering is required for this amusement, or the sled will turn sideways and spill the people out. Originally the open piazzas or garrison grounds at Quebec and Kingston were used for tobogganing, and the steep mountain behind Montreal was employed for that purpose also; but in recent years inclined planes are built for this joy, framed of heavy timbers and running to the height of fifty feet in the rear, which gives an incline of one hundred and fifty feet. In the central part of this plane are several slides with snow ridges between them, and the slides are kept well watered so as to be ready for the amusement at all times. A walk is kept on one side of the plane for the parties to return and haul their sledges up.

When the courses are used by night, they are lighted up with torches, electric lights, Chinese lamps, etc. The toboggan clubs wear costumes, the men generally being known by the color of their overcoats. Although it might appear that this amusement was hardly adapted for ladies, to sit on a long sledge with their feet tucked before them, yet the Canadian women, whose exercise and climate make them strong as well as handsome, know how to adjust their gowns, and thus the open air sports of the men are made social and universal by the participation of maidens and dames. One of the great charms of life in Canada is the sociability brought about by these athletic mutualities in the open winter air.

ICE YACHTING.

There remains for me to notice only the ice yachting. This, indeed, is more of an American than a Canadian amusement, and probably originated in the state of New York, and especially upon the Hudson river. The average ice-boat is of from five hundred to one thousand pounds weight, and is a skeleton of timber, shaped like the letter T, the long part of the T corresponding to the keel of a boat, and the cross part corresponding to the beam timber, and this cross piece has a runner or skate under each end, shaped somewhat like the human foot with a skate on it. The cross piece is called the runner plank, and a bench is built on it out of which rises a mast. The boat has a bowsprit, and a deck is built on her center timber up to the runner plank, upon braces. The runners are fastened by an iron belt between white oak chocks, and the skate plays free so as to pass over uneven places, and springs of rubber are often put over it. The runner skate is made of white oak shod with iron, and the curve is quite high; the iron is sharp and beveled. The rudder skate is simply another shoe under the tail of the center post, and turned by a regular tiller like a helm in a sailing boat; it is sharp at the bottom so as to take hold of the ice. The helmsman often has a little box to get into and be protected from the weather. The timbers of this vessel may be made of pine or spruce or ash. The rigging is that of any ordinary sail-boat, either sloop or cat-boat. Wire rope is used for the rigging; in short, this vessel looks like a catamaran with a tail behind it, or like an alligator with a mast and sails on him. These boats, of which there is quite a fleet on the Hudson river, often go a mile a minute, and one called the Haze has the record of having made two miles a minute. Persons on the Hudson river, expert in the use of these boats, have caught steam trains with them, which had passed up or down the river some minutes before. This last amusement is the most scientific of all exercises for winter in any quarter of the world. Ice yachting requires a combination of bright qualities, the nerve to steer well, the perseverance to surmount difficulties, the hardihood to stand strong weather, the science of the ship-builder, and the capital of the investor.

Nothing is more remarkable in our growth than the wonderful addition the Anglo-Saxon race in America has to exercises of all kinds. A yacht race in the waters of New York attracts, not only the whole land, but foreign lands. Walking matches of endurance have drawn the largest audiences ever assembled in this country; the bicycle and the tricycle are becoming almost as common as the buggy. The winter is the true time for exercise in our land, because the summer heats here are too strong for other than mountain and sea delights. Besides, a very large proportion of our population is unemployed in the winter, especially the hardy and agricultural class and the owners of lands, whereas in summer both the mills and the farms require all the labor they can get. The mighty expanse of our rivers and lakes, many of which are frozen the whole winter long, suggest that by the ice-yacht and kindred inventions, we may continue a species of navigation and of intercourse the whole year through, from Duluth to Lake Chautauqua and the lower St. Lawrence.

MY CHRISTMAS PRESENT.

BY WALLACE BRUCE.

A gift that stays,
A pledge that pays,
The sweetest word
In Eden heard,—
Chautauqua's key,—
"L-o-v-e."

Talk of your Christmas presents, boys,
Compared with mine, mere worthless toys!

Your slippers, gowns, and smoking-caps,
Your tidies, scarfs, and worsted wraps

Are well enough, and doubtless show
That more the giver might bestow;

But these are trifles matched with mine,
Which Annie-mates this happy line.

'Twas just by chance, the good old way,
We met one Merry Christmas day—

Exactly nineteen years ago—
The ground as now was white with snow;

The sky was clear, the stars shone bright,
The sleigh bells rang that joyous night;

The oft-told story, ever new,
Found welcome in her eyes of blue.

Yes, Santa Claus was kind to me,
And now, beside our Christmas tree,

We call to mind the golden prime
That tuned our hearts to rhythmic chime,

And wrote in letters fair to see—
"True love is always poetry."

Pray count those stockings red and small
Now hanging on the chimney wall:

You see how love at interest grows,
We're richer than the tax-list shows;

The best investment isn't stocks,
Unless you spell the stockings "socks."

Pin-cushioned dolls are well enough,
But give me hearts of solid stuff;

Cold comfort has the weary head
That rests on tidies pink or red;

No scarf for me, but loving arm
To keep the neck and shoulders warm;

Let others have the smoking-cap,
But give to me my Annie's lap;

I envy not your costly gown,
While her dear eyes look kindly down;

Drain dry your cups of bubbling bliss,
Give me her "hinnied lips" to kiss.

Old time may make her tresses gray,
But ne'er efface that Christmas day.

My stocking had been hung before
On mantle-piece and chamber door,

But Santa Claus here broke the rule:—
My present filled *two stockings* full.

The moral, boys, is short and plain:
Don't hang your stockings up again;

From long experience I know
You'll never get a present so;

Take my advice, look elsewhere,
And find one—in another pair.

THE CAROLINE ISLANDS.

BY EDMOND PLAUCHUT.

An Abridged Translation for THE CHAUTAUQUAN, from the *Revue Scientifique*.

A few months ago the *Gazette of Northern Germany* published the following paragraph taken from the *Pall Mall Gazette*: "The Captain-General of the Philippine Islands has received orders to send a governor to the Caroline Islands. We know of the archipelago of this name, only Guam, a Spanish possession." Bismarck's paper strangely republished this information, without making upon it any comment, and without correcting the gross error of the *Pall Mall Gazette*. Guam has always been the principal island of the Marianne group (or the Ladrões); it has never belonged to the Carolines. No one commits such blunders without intention.

How came the *Gazette of Northern Germany*, which never misses an occasion of being pedantic and disagreeable, to resist the temptation to give a lesson in geography to an ignorant publisher? Because it entered into the wishes of the Germans to leave every one in doubt in regard to the situation, political and geographical, of the Caroline archipelago. And what is taking place to-day goes to prove it. One of my greatest sur-

prises would be to see Germany deny the right of Spain to the archipelago in question. I lived for many years at Manila, (the capital of the Philippine Islands, which belong to Spain), in the neighborhood of the Mariannes and the Carolines, and never did I hear any one cast any doubts upon the claims of the Spaniards, in reference to these two archipelagoes. At all times I was accustomed to meet there, fishermen, from the Carolines, whom a hurricane had cast upon the coast of the Philippine Islands. They treated them not as ship-wrecked savages, but as unfortunate countrymen, and as soon as there was an out-going ship sent them back home. The Carolines are in constant communication with the Mariannes, which belong, without question, to Spain. They are almost as one family. This, perhaps, does not constitute a title of ownership in the eyes of the Germans, and of many others, but the Spaniards, have a different way of looking at this matter. Wrong or right, the latter have remained Catholics, and the great division of islands made by Pope Alexander IV., which gave

them the Carolines, is for them as valid as if it had been made yesterday. They do not wish one to dispute it any more than their right to Havana.

It was a Spaniard who gave to the Carolines the name which they bear. Spain sees in this, too, a justification of her rights, and it must be believed that this is not without reason, since the whole people,—a great people—are roused, determined to aid in this demand. And more, there were missionaries of Spain who poured out their blood in the Carolines in order to evangelize them, or, more properly speaking, in order to conquer them. Does not this blood give Spain a title? The English press of Hong Kong, which has never shown itself friendly to its neighbors, the Philippines, spoke justly three months ago of the necessity of sending a Spanish military force to Yap or to Ualam, two of the Caroline Islands. It did not ask that Spain should establish there an incontestable sovereignty, but that she should forward a ship of war and some soldiers for a police force for the archipelago. Hence arose the question of her abandonment. For more than a century the Spaniards have been unconcerned concerning what took place in the Carolines, and did not even think it necessary to appoint a governor after their priests ceased going there. But what nation has been interested more than they? Has Germany or England? We shall astonish many persons by saying it was Spain first at the commencement of this year, which made her appearance in the Carolines. She had sent there at last one of her war vessels, the *Velasco*, in order to prepare for the residence of a governor, which she designed now to send them.

A few days after the arrival of this vessel, at the time they were preparing the troops for occupation, and the archbishop of Manila, the primate of the Indies, was organizing a religious mission, there was announced, as a clap of thunder, the news of the German protectorate.

Is it so difficult now to understand the irritation of Spain and the justice of her claims? And what a time the Germans have chosen! When the financial distress of Spain has never been greater, and when she is agonizing under the pitiless blows of the cholera.

The Carolines, situated between 6° and 21° north latitude, and 135° and 160° east longitude, constitute one of the great archipelagoes of the Pacific ocean. They are divided into three principal and very distinct groups, that of the west with five islands, that of the centre with twenty-five, and that of the east with eight. Very little is definitely known regarding these islets. According to the geographical dictionary of M. Saint Martin, the archipelago comprises forty-eight groups containing five hundred islands having an area of about one thousand square miles.

In 1686, a Spanish navigator, Francisco Lescano, (although not the first to visit the archipelago) discovered in these parts a great island to which he gave in honor of Charles II., the king of Spain, the name of Caroline. In the same way he applied, during the same epoch, the name of Marianne to the islands which lie north of the Carolines, in honor of Marianne of Austria, the second wife of Philip IV., and the mother of this Charles II.

What was this great island discovered by Francisco Lescano? Was it Ualam? Was it Yap? It will never be known. Whatever one it was, its name was given to all the rest.

The inhabitants of these islands, according to Father Cantova, a Spanish missionary, are a race of hardy navigators. They believe that the sun, the moon, and the stars have their joy, their grief, and all sensations as we have them. Over their heads in the sky, they believe that there are kingdoms inhabited by celestial beings who live in ether as we do upon the earth. There is no trace of temples, of idols, of priests, nor of sacrifices. They venerate some of their dead and suppose that they have passed from a mortal to an eternal life, or rather into one of the kingdoms of the sky. They have among them some men and women who pretend to be in communication with the

dead. These teach them that there are those of their families who live always, and those who pass away into nothingness. The elect descend from their celestial abodes to the earth the fourth day after their decease, in order to wander invisible in the midst of their relatives and friends. They call them the good spirits; each family has its own. They have recourse to them in times of great necessity or danger. In order to obtain their protection or to thank them for these blessings, they suspend offerings at the doors of the chief of the village.

Polygamy is permitted; and the *tamol*, or the chief of an island, is ranked according to the number of his wives. The *tamol* of Yap, one of the most thickly populated of the islands, has nine. The dead are thrown into the sea. There are some bodies, however, which they wish to honor, and these are placed in coffins and buried in stone vaults. They indicate their grief at the loss of a friend by cutting their hair.

The men make canoes, weave sails, fish, and gather the fruits. Their tools are formed of stones, and are provided with wooden handles, as those of the prehistoric races.

Having neither alphabet nor books nor teachers, the ignorance of these people is great. They are, however, well informed in a rude way, in astronomy. Trusting always to the stars, never to the sea, they have never made a false route. But when a tempest or a typhoon surprises them, they are often driven upon the Ladrões or the Philippines. The Carolinians have for arms a spear at the end of which is fastened a fish-bone or the teeth of a shark. They are not quarrelsome among themselves, and if a difference rises they settle it by arbitration. In war the combatants advance in three lines; the first is composed of small boys, the second of young men, and the third of mature men. At a short distance apart, two of the young boys leave the ranks, and attack each other, armed with slings. If one of them is wounded, the children withdraw, giving place to two young men, and these in their turn to the mature men. The conqueror, just as a victorious cock, celebrates a victorious chant.

In the month of February of the present year, the *Velasco* entered the port of Tomil, in Yap, one of the principal islands of the Carolines. This island is surrounded as with a green girdle by large cocoanut trees. The nuts are used for food by the inhabitants, and are also fed to the swine. These animals and the goats which one sees there, have been imported.

During the monsoon from the north-east which makes itself felt from September to October, there happen in Yap frequent hurricanes. It does not rain much but the winds are violent. In June, the monsoon from the south-west sets in. This is the time of the great rains, which end only at the last of August, and of the greatest tempests. During the other months the temperature is agreeable and the sky clear. There is no lightning and little thunder. Occasionally earthquakes of short duration are felt. The island of Yap owes its origin to an upheaval of the submarine soil. It is surrounded as Ceylon, with reefs of coral, whose constant disintegration increases its height above the water. The islanders of Yap do not number more than twelve hundred. One finds in this corner of the world four houses of commerce, two belonging to Germans, one to an Englishman, and one to a citizen from the United States.

What is remarkable in this island and in the whole archipelago, is that they do not raise cereals. They have never been able to acclimate rice. The land, however, is very rich, and produces abundantly, cocoa trees, bananas, yams, sweet potatoes, pineapples, and bread-fruit. The fauna is reduced to its simplest forms. Except the rat, there is not to be found a single quadruped. There are great numbers of doves, turtles, dogfish, and lizzards.

Don Louis Cirera, the physician of the *Velasco*, thinks that the Carolinians belong to the Malay race. The hair of some is glossy and wavy, of others, stiff, long, and abundant. The forehead is high and slightly inclined forward. The cheek bones are not prominent. The figure is tall and heavy set.

The mouth is large; the lips thick; the eyes large and black; the nose straight and not flat; the teeth colored black. Men and women are tattooed in a remarkably regular manner.

These people know neither anger nor violent passions. Their language bears the marks of this calmness of spirit and of feeling. It is sweet although sonorous, and of an easy pronunciation. Their clothing consists mainly of short skirts fastened about their waists. For the sake of personal appearance the women stain the inside of their hands, their throat, and breast, yellow. Their hair is separated and rolled in two parts at the back of the head, and well crimped. They wear tortoise-shell combs, which are strictly forbidden to all slaves or servants.

In spite of the great abundance of poultry and imported swine fattened upon the nuts of the cocoa, the inhabitants do not eat any meat. They keep these animals in order to sell them to the Europeans, or to the whalers who put into port among them. Each family possesses near its own hut a plantation which is sufficient for its subsistence. The houses are of wood, and more artistic in their forms than those of the inhabitants of the Philippines.

Each village has its own chief who has the right of life and death over his subjects. Robbers and assassins are punished by hanging. One meets there two castes, the one free, the other slaves. The ranks of the latter are supplied by prisoners of war. The sons of slaves never become free. One recognizes them from the fact that they never wear any combs in their hair. The Europeans established at Yap, have for servants Carolinians to whom they pay from fifteen to twenty-five francs

a month. The native domestics accept readily in payment of their salary, English money, but the independent Carolinian does not wish it. Money for him consists of circular stones perforated through the center.

These people believe in a supreme being, an all powerful God, who sends upon the poor human race, scourges and punishments. One day the officers of the *Velasco* wished to visit a unique religious establishment which was found at Yap. After having walked a long distance through a thick forest, they reached a clearing in the midst of which rose a little hut in the form of a triangular pyramid. Opposite one of its sides stood a heavy stone, irregularly shaped. On another side was heaped up the debris of the cocoa nuts, the food upon which the sainted man appointed to guard this sacred place, lived. If a chief wished to punish the people, all that was necessary for him to do was to shake this sacred stone, and at once the earth would tremble, and the sea overleap its boundaries and destroy them. Not a chief had ever had the hardihood to attempt this deed, but the fear of such an event held the people in the straight line of their duty. No islander ever dare approach the sacred place, and still less to touch the monolith. The guide who conducted the officers dare not himself come in sight of the hut, and all the time during their visit, he gave signs of terror. At the side of this stone grew a sacred tamarind tree.

Such is the fecundity of the soil, that some of these islands as seen from the sea, present the appearance of baskets filled with flower.

Here end the observations of the officers of the *Velasco* upon the Carolines.

WEST POINT.

BY LIEUTENANT JOHN K. CREE, U. S. A.

To many of the casual visitors who stop at West Point from the New York excursion boat which reaches there a little before noon and leaves about 3 p. m., the few hours stay must be of extreme interest. The beauty of the academy grounds, and those grand views of which one never tires, up, down, and across the Hudson, the river itself, with the many white sails dotting its surface,—all must interest the lover of nature; while the buildings, the batteries of guns, the trophies captured during the wars of the United States, must prove equally interesting to another class of people. Then the cadets, as they are seen marching to dinner, perhaps, or out on the plain playing ball or tennis, or at drill, excite various feelings according to the age, sex, or other conditions of the visitors. To an old veteran, the sight of such playing at war might be amusing, but in the average youth of fifteen or twenty years of age, it generally awakens the ambition to be a West Point cadet himself sometime, if possible.

The academy is situated on a bluff one hundred and fifty or two hundred feet above the river, and the road from the dock and depot winds up the bank past the riding hall, where it divides, one branch leading along the lower part of the grounds to Highland Falls, the other past the library and chapel across the plain to the West Point Hotel and along the upper part of the post.

The grounds, or, as they are more properly called, the "cadet's limits," include, perhaps, twenty-five acres, the greater part of which is the plain in front of barracks which is divided almost equally into the "cavalry plain," and the "grass plain." In one corner of the latter, directly in front of the superintendent's quarters is the parade ground. One street runs the length of the post, changing its direction several times, and being lined on one side with the houses of the professors and instructors.

The camping ground, where the cadets spend the summer, from about June 15, to August 28, is beyond the cavalry plain, near the hotel. On one side of it is an artillery park, and on the other is Fort Clinton, an old Revolutionary work designed by Kosciuszko, and bearing on one of its salients a monument to his memory.

The public buildings are generally the first objective of a visitor after a glance around the grounds. The library, chapel, mess hall, and the academic building with its museums, may be examined by visitors; but to see the inside of the cadet barracks, which is for many reasons most desirable, it is necessary to be accompanied by an officer, or, better, by a cadet, who is more at home, and who feels more at liberty to explain the many little expedients to which they resort for comfort and convenience, and in some cases, perhaps, "to get ahead of the officers."

To one who does more than merely look around the grounds, there are many interesting things to be noted, such as the course of instruction, the manner of teaching, the discipline, habits, and amusements of the cadets, and all those things which together make up their lives there. But to become thoroughly acquainted with all these would require quite an extended visit or rather, a trial in person, of cadet life.

Cadets are appointed to the academy by the president of the United States, being nominated by the congressman from each district. In addition to these are those appointed at large by the president, so that the number of the cadets is generally about three hundred. These are divided into first, second, third, and fourth classmen, according to the number of years that they have been at the academy; the first being the higher, or senior class. The fourth classmen are commonly known as "plebs," third as "yearlings," so called from the time they enter until a year from the next spring; when as they go on

furlough in the summer, they receive the name of "furlough-men." This name of "furlough-men" clings to them after their return until late in the winter of their second class year, when it is dropped, to be given in turn to their successors. First-class-men are always simply "first-class-men."

When the young men who have received appointments to the academy first report, they are designated as "beasts" by the cadets, and remain so until they have passed the preliminary examination, when they are transformed to "plebs." The first six months in the academy seem to be regarded by the authorities as a kind of a probationary period, as the fourth-class cadets during that time are known officially as "conditional cadets," and do not receive their warrants. But to most of the cadets the entire course has somewhat of a probationary character, since their stay there seems generally so very uncertain. And this fear is not unfounded, as is shown by the number who fail to graduate. There were only thirty-eight cadets who received diplomas last June, out of almost one hundred who were admitted four years ago, and of the original one hundred and fifty or one hundred and seventy-five who applied for admission.

The preliminary examination is in the common branches only, and while not very extended, it is very thorough, and demands a competent knowledge of the studies considered. It is no harder than any boy of good common school education should be able to pass; but the many failures show that something is wrong. Each year there is a howl from the rejected candidates, their friends, and congressmen, about the high standard of admission, while the trouble lies elsewhere. To lower the standard of admission would be only to increase the number of cadets found deficient in later examinations, as it is generally the rule that those who have succeeded in being admitted at a second or third trial, drag along at the foot of their classes and finally drop out. However, there are exceptions to this many times.

The semi-annual examinations occur every January and June, and whether oral or written, are very thorough. They are public, and are a source of much amusement and anxiety to the friends of cadets who are there, as, for instance, when a cadet persists in inventing new systems of tactics, or developing astonishing combinations of chemicals. A short time ago a cadet gave, as an example of sublimity of expression, the sentence, "And Moses said 'Let there be light.'" Gen. Howard, who was superintendent then, said: "Well, sir, was it Moses who said that?" The cadet replied, "Well, I knew that it was Moses, or some of those old men."

A story which has been handed down in the corps for several years, is that of a student who was being examined in surveying, and was required to draw and explain a theodolite. He stood near the bottom of his class, and knew his own inability to do anything with the subject, so he drew a neat picture of a square box. When called upon to recite, he said that he was required to make a drawing of and explain the theodolite.

"Well, sir, where is your instrument?"

"It is in the box, sir."

Needless to say that he was discharged.

Cadets found deficient in any study at an examination are discharged from the service, though in a few cases, where the academic board judge them worthy, as, for instance, where by sickness they have been prevented from studying, they are "turned back" a year. They must, however, take the entire course in the lower class as pursuing the studies of different years at the same time is not permitted.

The proficiency or deficiency of a cadet in his studies is determined from his daily marks and by the examinations. The latter are generally equivalent to a certain number of recitations, and their decisive character renders them of great importance.

The course of instruction has been arranged with great care,

and is intended to give the cadet a thorough knowledge of the foundations of the different arts and sciences, which will be necessary for an officer, and to fit him for further study in more special subjects.

The fourth class and third class years are occupied with mathematics, English, French, and drawing. In the second class year the cadet takes up philosophy, chemistry, geology, mineralogy, electrics, tactics, and drawing. In the first class year the studies are more purely military, civil and military engineering, art and science of war, law, ordnance, and gunnery, Spanish, and general history. All of these have more special bearing on his profession.

Then in addition to his studies, the cadet is continually receiving practical instruction of all kinds. The members of the upper classes are placed in command of those in the lower, and thus receive instruction and experience as officers. Drills of some kind take place during spring, summer, and autumn. No drills, except cavalry in the riding hall, occur during the winter, or in bad weather. But to make up for this, several are held each day during June, July, and August. The drills are distributed as follows: In March, company drill (infantry); April, artillery drill of several kinds, according to the guns used; May, battalion drill. This latter is the most extensive, and is generally thought the most interesting. It usually lasts about an hour and a half each afternoon, Saturdays and Sundays excepted. Dress-parade takes place each afternoon about sunset, and in the morning and evening in camp. During bad weather, the parade is undress.

The most enjoyable drill to the cadets, and, perhaps to visitors, is the cavalry drill. A large number of horses are kept for the use of cadets, and during the winter those belonging to the first, second, and third classes ride every other day. The first class continue it during the fall and spring, and in pleasant weather ride on the cavalry plain, where the greater extent of ground makes the ride more pleasant. Beginning with the third class, they are taught to be thoroughly at home on a horse, and during the first winter, ride entirely without saddles, and are taught to "stick on," to mount and dismount and go through various exercises. The second year they are given saddles, curb bits to their horses, and soon they receive sabres and spurs, and are taught the sabre-drill. In addition to keeping up their bare-back drill, they are taught to mount and dismount with saddles, first with horses standing, then going at a walk, trot, and gallop; to vault, mount and dismount on either side, and with one hand, either right or left, to pick up things from low posts or from the ground while the horse is at any gait; to take hurdles, and to mount and dismount while going over a hurdle, or immediately before or after it.

In the first class year all these exercises are continued, and others added, and all brought to greater perfection; riding double, or with saddle girths unfastened for example. Then in addition, receiving instruction in the drill with the revolver and carbine, and firing at a target from horseback, sometimes riding at a gallop and firing at the target in front or rear or on either side.

The most exciting drill is that on the plain during a charge, either in platoon, company, or battalion front. The cadets advance in line at a walk, then trot, then gallop, and at the command "charge!" the horses break into a wild run, the riders yell their loudest, and cut with their sabres at imaginary enemies as they go tearing up the plain, raising clouds of dust, the horses throwing up sand and gravel which almost blinds those in the rear. The horses themselves seem filled with the madness of the moment, and when the end of the plain is reached, it is almost impossible to stop them.

This is the time that a cadet wants a fast horse—no matter how rough, or ill-looking, or unmanageable. If he is only fast enough to come out ahead in the charge, that is the best of all, and every day comes, and always will come, the controversy as to who *did* come out ahead.

The charge is dangerous, but that is why the cadet likes it. It is so exciting!—and the pleasure of having a horse tearing away with one is incomparable. The number of accidents is very small indeed, and they are seldom serious. It is often said at West Point that "you can't kill a cadet," and indeed, circumstances seem to justify the saying.

While in camp, the instruction of the cadets is entirely practical and quite varied, consisting of artillery and infantry drills, swimming, rowing, dancing, mounting guns, constructing military works, and other engineering drills, besides the ordinary duties of guard and parade. In barracks, cadets are posted as sentinels in the halls to prevent noise, visiting by cadets, etc., from twenty minutes after supper until a quarter of ten; but while in camp a cordon of sentinels is posted around camp, and is kept up continually, night and day, rain or shine. Their duties are of a comparatively trifling nature, perhaps to keep citizens out of camp and the cadets in, but the strictness with which they are required to perform them gives these duties great importance. A rainy day always causes rejoicing among the cadets, as this is almost their only relief from the drills, which, as may be supposed, they do not love.

"For instruction in infantry tactics and military police and discipline, the cadets are organized into a battalion of four companies under the command of cadets, and each company is under the command of an officer of the army designated as assistant instructor of tactics, or more familiarly by the cadets, as a "tac." In addition to these are the cadet officers, who are selected on account of studiousness, soldier-like performance of duties, and general exemplary deportment, and holding office generally on good behavior for one year, the captains and lieutenants from the first class, sergeants from the second class, and corporals from the third.

Discipline is maintained by a system of reporting. When a cadet commits an offense against the regulations or general orders, or in fact, does anything that he should not, it is the duty of any officer who sees it, to report it to the commandant of cadets. This may be done directly or by the ordinary medium of the "delinquency book" kept by the first sergeants of each company for the purpose. The report is written here immediately following the name of the reporting officer and the cadet reported, as: "Smith; Jones; late at breakfast roll-call," which means that cadet sergeant Smith reported cadet private Jones for being late. This list of delinquencies is handed in to the commandant each morning, and after being examined by him, is published at parade by the cadet adjutant and posted on the bulletin board for inspection by the cadets. The one reported for an offense is allowed, and for certain offenses is required, to submit a written explanation within two days. If the explanation is satisfactory, the report is removed; if not, the report and explanation are forwarded to the superintendent who considers them, and may remove the report. If not, he orders what punishment the cadet is to receive. In cadet slang a report is known as a "skin," to be reported is to be "skinned." The delinquency book is the "skin-book;" the bulletin board is the "skin-board;" and the officer's street in camp is known as "skinner's alley."

The punishments awarded cadets are demerits, confinements, extra duty, light prison, dark prison, suspension, and dismissal.

These punishments are taken just as a matter of course. It is not considered dishonorable to disobey regulations, and it seems to be an understood thing by both officers and cadets that the cadets take their own chances when violating regulations and orders. This, of course, is only in the case of the little regulations which are merely for their discipline, for, in the more important things, there is a sense of honor among them that amounts almost to religion. A cadet who tells a lie, (if he is not dismissed for it) or who does anything that is considered dishonorable, is ostracized by his fellow students, and his life there becomes almost unbearable.

In spite of their many duties and the strict discipline, cadets

manage to have a pretty good time generally, especially those who stand about the middle of their classes. The middle of the class is the most comfortable place to hold, for those at the head of a class have to study very hard to stay there, and those near the foot—"the immortals" they are called—have to study very hard to avoid being found deficient and discharged.

Cadets receive from the government five hundred and forty dollars a year, and from this they have to pay for their board, clothing, washing, lights, books, and all other expenses; and the cost of these has been so computed that it is barely sufficient with economy to make both ends of the year meet. Each month four dollars is reserved from the pay of each to supply him with an outfit upon graduation. He never handles, or even sees the money. It is paid to the treasurer, and placed to the cadet's credit, and each one has an account book in which all purchases and the condition of his finances are recorded. For anything as clothing or some necessary article as soap, matches, postage-stamps, etc., he submits a requisition to the treasurer, giving a list of what he wishes to obtain, stating what supply of the article he has yet on hand, the date when he last ordered it, the purpose for which he wishes it, and how much he was in or out of debt when his account was last settled. Then he certifies that the articles are necessary and for his own personal use. The treasurer or, perhaps, the superintendent inspects the requisition, grants it, cuts it down, or disapproves it, as he thinks best. If granted, the articles are issued to the cadet upon presenting it at the store, and are then charged to his account.

After cadets have been at the academy for two years they get their furlough for two months and a half. This is, perhaps, the most delightful period of their existence, when they become a citizen for a short time—the freedom is so sweet, the enjoyment so intense. The only drawback is the thought of having to go back on the 28th of August—and that return! If furlough is the happiest, perhaps the return from it is the most disagreeable thing about West Point. Even the welcome one gets from his friends, and the hop on the night of his return, do not remove the thought of coming back to study, close confinement, and all the discipline. Furlough has gone so quickly, and afterward it seems but like a pleasant dream.

Those cadets of the first, second, and third classes, who have no demerits for the six months ending January 1, are, at Christmas, generally allowed a leave of absence of about three or four days, and in some cases this may, at their request, be postponed to the following summer.

Cadets are required to march to and from meals. It is a short distance, and they would be only too glad to walk instead of marching, but that would not be considered military, and so they must march. Their food is of very good quality. In this department there has been a great improvement in the last few years, so that now without any increase of cost they are furnished with better food, and have it served to them in a more inviting condition. Two cadets live in each room, though sometimes there may be one or three. They are required to sweep the room, make their own beds, dust, etc. Each one serves alternate weeks as "room orderly," and is responsible for the condition of the room, and for any disturbance that may occur.

The duties of a cadet may be best shown by following him through an entire day. Take, for example, a first class-man, a private, on a day in September.

He is awakened a few minutes before 6:00 by the reveille gun and by the drums beating in the lower halls of barracks. The drums and fifes continue to play the tune that he has heard for so many mornings, and as he is dressing, he can tell just how much he will have to hurry to get into ranks before the drums stop.

He gets down stairs and to his company in time, the roll is called, the companies dismissed, and he comes back to his

room; if he is orderly, perhaps carrying a bucket of water. He then makes up his bed, sweeps the room, puts it all in order, aligns his shoes along a crack at the edge of his bed, washes, and completes his toilet. At 6:15 sick call is sounded, and those who are sick have an opportunity to go to the hospital and see the surgeon. At 6:20 police call is sounded, and the rooms of barracks are all inspected by the "subdivision inspectors," who are cadet officers placed in charge of eight rooms apiece. They look in the door, see that all is in order, the room swept, the shoes toeing the crack, the bedding piled, wash bowl turned upside down, etc. At 6:25 is the first drum, and at 6:30 the second drum for breakfast, and the cadets are marched to the mess hall. Breakfast lasts until 7:00, and from 7:00 to 8:00 is a recreation hour, but it is generally occupied with little odds and ends for which one cannot find time during "call to quarters,"—submitting permits, going to the store or shoe-black's, visiting cadets, perhaps for assistance in some of the day's studies, or more generally in study, for at 8:00 recitations begin. At five minutes before 8:00 the "first bugle" blows. This is the signal for "call to quarters," as well as to recitations. At 8:00 the "second bugle" blows, and the sections are formed in the area by the officer of the day. A section consists of six to ten cadets who are under one instructor; they are marched to and from the academic building by the ranking cadet in each, who is responsible for their conduct. The small number in the section, and the time allowed for the recitation give evidence of the thoroughness of the instruction.

At either 8:00 or 9:30 our cadet goes to engineering. If at 8:00, he returns at 9:30 and studies history till 11:00. If at 9:30, he has for study the time from 8:00 to 9:30, and recites from 9:30 to 11:00. In the same way he goes to history from 11:00 to 12:00, or from 12:00 to 1:00, having an hour of study in either case. On alternate days he goes to riding instead of to history. At 12:55 is the first, and at 1:00, the second drum for dinner, and from this he returns about 1:45, and has until 2:00 for recreation, or, if he wishes, for study—and the first classman generally studies—particularly if he goes to ordnance and gunnery at 2:00. He must go either at 2:00 or 3:00, and on alternate days he goes to law in the same way. At 4:05 is the first drum for drill, with the second at 4:10. Being September the drill is the battalion infantry drill, which lasts until about 5:30. Our cadet goes to his room, changes his clothes, has his shoes brushed, or puts on a pair that he has had brushed before, and is ready for parade at 5:40. Parade lasts about forty or forty-five minutes, and with five minutes to take his gun to his room and take off his belt and gloves, he goes to supper, getting back a few minutes after 7:00. He then has a half hour of "release from quarters," and this half hour is, perhaps, the most enjoyable of the day. He may go out walking with some of his classmates, and, turning down to the grassy slopes of Battery Knox high above the river, lie down and watch the steamers and boats going slowly up and down, or the trains with their rows of lighted windows passing swiftly along the other side, flashing through the twilight; and talk of the day in the next summer when he will go away to stay; and even wish he were on that particular train to go away—away, he cares not where,—just away from West Point. But the bugle blows "call to quarters," and the half hour seems to have been only a few minutes, and as the mellow notes go echoing over the plain, they slowly get up, and with a little friendly tussel in the endeavor to push one another over the parapet, they slowly wander back to the rooms to study—everlasting study.

If our cadet stands near the head or foot of the class, he may study till 11:00, for first classmen are allowed a light for an hour extra on account of their studies. But if he is near the safe middle, or if the lesson is a little easier, or he a little more reckless than ordinary, he may go to bed at 9:30 or 10:00, or in spite of regulations, even before 9:30.

At 10:00 "taps" is sounded, and all lights must be out and

all cadets in bed, and the day is ended. But do not think that no watch has been kept over our cadet during all this time. He is continually subject to inspection. Police inspection at 6:20 is the first. Between 8:30 and 10:00 the tactical officer inspects the room closely. The officer of the day inspects between 10:00 and 12:00, and again between 2:00 and 4:00. He has to go into every cadet's room in barracks, and is on honor to report all violations of regulations. During the evening the rooms are again inspected by the "tac" and three times by the sentinels, who are posted in the lower halls. Then again at "taps" by the subdivision inspectors, and after "taps" the "tac" once more makes his rounds, this time with a bull's-eye lantern, with which he throws light into the faces of the cadets as they lie in bed asleep, and verifies their presence.

All are glad to have Sunday come for it gives them a little relief from their study, but it is not entirely a day of rest for them. Reveille, police inspection, and breakfast are as usual, but at 8:00, instead of recitations, they go to Sunday morning general inspection. Not a spot of dust or dirt or rust is allowed, and if found the cadet is reported. The cadets usually spend the hour from 7:00 to 8:00 in getting ready for this, in addition, often, to time spent the afternoon or evening before.

Inspection in good weather requires about three-quarters of an hour. At 9:00 "call to quarters" is sounded by the bugle, and at 9:30 the rooms are inspected by the commandant and tactical officers. This inspection is the most thorough of the week, and the rooms must be faultless.

Cadets are required to attend chapel every Sunday morning at 10:40. The usual drums for assembly are beaten, the companies formed, wearing side-arms and gloves, the "side-arms" being the waist belt and bayonet. The companies are inspected by the cadet captains, to see that their shoes are blacked, their clothes dusted and in good condition. They are then marched by companies to the chapel. The service is at present Reformed Episcopalian, with perhaps, a few changes. Roman Catholics attend service in their chapel on the post at an earlier hour. At the close of the service, the cadets rise by command and are formed, marched back to barracks, and dismissed. From that time to dinner, they have release from quarters, and after dinner till 3:00, and from 4:30 till parade, being confined to their rooms from 3:00 to 4:30, except those who attend Sunday-school. This is held in the chapel at 3:00, attendance being voluntary.

Parade on Sundays is the same as on week days, except that the band plays a portion of a hymn after "sounding off," and the cadets march in at "quick time" instead of "double time." Supper and call to quarters are the same as on week days with the exception that all who wish may attend the cadet prayer-meeting, which is held immediately after supper and continues an hour or so. The majority find it necessary to study on Sunday evenings, and the usual guard duty and inspections go on.

Upon graduation the cadets are assigned to the army to fill existing vacancies in the rank of second lieutenant. If there are less vacancies than graduates, the excess, taken from the foot of the class, are discharged the service. Formerly they were made "additional" second lieutenants, but the law at present does not allow this. Still the number of vacancies is usually greater than that of the graduates so that all are provided for.

Usually the graduates are allowed a certain freedom in the choice of regiments, those graduating highest having the first choice, and so on, as determined by their class standing, but this is not always closely followed, as cases have occurred where graduates have ordered their uniforms for one branch of the service, having chosen a particular regiment, and feeling confident of getting their choice, and have been obliged to have them considerably altered by being assigned to another regiment and a different branch of the service.

THE HELL GATE EXPLOSION.

The purpose and progress of the great undertaking at Hell Gate have been so little known to many at a distance from the locality that a brief statement seems proper. The work of removing obstructions from the New York bay and its approaches has been carried on for many years, but never before so efficiently or with such satisfactory results, as during the last decade. The bay which gives our metropolis a commodious and safe harbor, one of the finest in the world, is entered by vessels from Liverpool and other places, either directly from the Atlantic, crossing the bar off Sandy Hook eighteen miles from the city, or by the way of Long Island Sound, and the narrow strait called East River. The largest ocean steamers can pass Sandy Hook safely, as there is usually at high tide from twenty-seven to thirty-seven feet of water in the channels. In the sound and strait, the narrowness of the channel and the rocks in places obstructing it, make navigation at times very dangerous. Yet, as it shortens the distance and saves time, the sound is a great thoroughfare for all vessels of less tonnage. The estimated value of the ships and cargoes which pass through the strait daily, will average nearly five millions of dollars; and of these about fifty a year strike the rocks with results more or less disastrous. It is easy to see that millions judiciously spent to lessen the danger, will in time save many millions more.

The most dangerous place is not now, as it formerly was, "near," but directly opposite a populous part of the city. When the tide is rushing through the narrow, tortuous channel, the rocks cause strong cross currents and swirls or whirlpools, which are avoided with difficulty.

Congress having made liberal appropriations for the removal of these obstructions, the government engineers first directed their efforts against the dangerous reef at Hallett's Point, which at high tides was mostly under water. Having by a cofferdam secured a place for sinking a shaft, extensive excavations were made in the rock, and fifty thousand pounds of powerful explosives arranged in the places provided for them. After years of arduous labor, the whole was exploded, and the entire reef so broken into fragments that, by subsequent dredging and the action of the currents, it was easily removed, leaving in its place a clear channel twenty-six feet deep.

Attention was next directed to the great central reef known as Flood Rock, which covered an area of about nine acres, nearly one acre being above water. The success at Hallett's Point suggested the possibility of also removing the greater obstruction caused by the island of rock in the midst of the channel. Nine years ago the difficult and dangerous task of breaking that immense body of solid rock into fragments was resolutely undertaken. The engineers had here the advantage of a sufficient surface of exposed rock on which to erect their machinery, and commence operations. A shaft was sunk sixty-four feet deep, and at a depth of fifty feet, galleries were excavated in different directions. Some of the chambers made were extensive, and were twenty or more feet in height; others were tunnels connecting them, intersecting each other, and multiplied till their united length was more than four miles. Thus the whole rock was honey-combed, these excavations reaching as near the water as it was safe to go. Railways were constructed and mule power employed to bring the broken rock to the shaft, where it was hoisted by steam, and dumped in a way to increase to some extent the little island on which their works were constructed. When there was obtained for it sufficient room in the mine, a close, well-lighted house was built near the shaft, where the workmen doffed their wet, soiled garments, and donned others more suitable before coming up to the light of day.

A principal difficulty which was anticipated and met, arose from the accumulation of water in the tunnels and chambers as they were excavated. In many places the drippings were a serious hindrance. The water was conveyed in little canals to a deep well, and pumped out. There was, of course, much blasting done to break up the rock, and it required skillful management to adjust the charge to the amount they wished at any time to detach. One blast uncovered a jagged seam through which the water came in such quantities as suggested imminent danger. Added to the drippings from other parts, it filled the deep well at the shaft about as fast as the powerful pumps constantly at work could lift it to the surface; any considerable increase of the little cascades which were then pouring down the wall, would soon flood the mine, and it might come so suddenly as to drown all who were at work in it. To guard against this, a strong, wooden wall was built across the tunnel into which the water flowed, sufficient to confine all that could not be disposed of at the well. Happily, there was no considerable increase, and not even that section had to be abandoned before the work was completed. The excavations once finished, the next thing was to drill fifteen thousand holes in that gneiss rock to be filled with two hundred and eighty-five thousand pounds of dynamite and rackarock powder. The holes were ten feet deep and sufficiently large to receive the copper cartridge cases two and one-half inches in diameter. In the roof of each chamber were three holes; one central and perpendicular, the others at the sides, and inclined at an angle of about forty-five degrees. The walls between the chambers, being twenty feet thick, these would nearly meet. The drills were worked by compressed air conveyed in iron tubes along the bottom of the tunnels. The explosives were manufactured at Mill Rock, and the copper cases, twenty-four inches in length, when filled and soldered by steam-heated soldering irons, were placed in partitioned wooden boxes, and carefully conveyed to the shaft to be let down into the mine. It only remains that they be placed securely in the receptacles, prepared for them, and the proper connections made to secure the instantaneous explosion of the whole. About fifty thousand of these cartridges had to be placed before the work was complete. This was dangerous work, since the dropping of a cartridge when handling it, or any accident giving a sudden jar, might cause an explosion; and only the most careful, trustworthy men, who fully understood their danger and responsibility, were employed to do it. These workmen, on ladders or scaffolds which had been prepared, received the cartridges as they were handed to them, and pushed them up to their places with wooden rammers, leaving a few inches of the last one inserted to extend from the hole, to make the explosion more certain. They were held in position by little elastic spurs attached to their rims with springs sufficient to sustain them. Lieutenant Derby, who had personal oversight of this work, in bearing testimony to the competency and carefulness of the men employed, said that not a single accident occurred in all the work of charging the mine by the fault of any one. The cartridges were filled principally with rackarock powder, a very powerful explosive, which, as described by one who witnessed the process of mixing and packing it in the copper cans, resembles an inferior kind of wet brown sugar, and is said to be composed of chlorate of potash and a dark oil called dinitro benzole. These ingredients, harmless when separate, when combined make the powerful agent which was principally depended on to tear in pieces those acres of solid rock, for it would seem from the proportions used that, in the judgment of the engineers, the destructive dynamite, if more readily exploded, is not quite so

powerful as this new and harmless looking mixture. To only about three thousand of these exposed ends of the cartridge cases were attached insulated wires which were to connect them directly with the firing battery on the shore. All the rest, it was confidently believed, would be exploded by the concussion. This theory was confirmed by the former experiment, as in removing the debris of the reef at Hallett's Point, not a single unexploded cartridge was found.

The serious and responsible work of charging that greatest mine ever constructed by man, required many weeks for its accomplishment, and proceeded mostly in silence, the men being too intent on what they were doing to converse about anything else or about that, further than seemed necessary. One testified that about the only sounds heard were the rippling of water in the little canals conducting it to the well, and the measured strokes of the pumps still working steadily to keep the mine from being flooded.

When all was finished, the men left the mine where their work had been carried on assiduously for nine years; and means were taken to have the whole excavated space filled with water, which would serve as a kind of general packing for the blasts in place awaiting the touch that was soon to rouse those giant powers which slept quite unconscious of their might. It only remained to remove from the little island such of the machinery and buildings as they could; and, as the appointed hour drew near, many thousands of eager spectators sought positions from which they could behold whatever phenomena the great explosion might reveal. Many who would have come nearer, were prevented by the guards, and those who obtained positions which they were allowed to occupy, an hour before the time, as many did, had simply to wait. Those who came near the time appointed did not wait long. A necessary delay of a very few minutes caused some disappointment, but at thirteen minutes past 11 o'clock, October 10, General Newton directed his young daughter to touch the key of the battery, when a dull, neither startling nor deafening sound, such as is caused by the simultaneous discharge of a park of heavy artillery, was heard, and the earth was shaken for many miles around, but less violently than was expected. To most observers, neither the sound nor the shock seemed commensurate with the vastness of the preparation, or the work that was accomplished. A line of points for time observations had been established, and competent professors with their chronographs and seismoscopes, made careful observations of the earth tremors and atmospheric waves produced. Some were entirely successful, and will in due time report observations which the scientific as well as the general public look for with great interest.

To mere spectators with no scientific object in view, the phenomenon was vastly more to the sight than to the hearing or any other sense; for immediately there rose vast columns of water from nearly the whole space undermined, towering to a great height,—a grand spectacle! and by several described as a huge iceberg. A young man from this county, who witnessed it, in writing to his brother, says: "It was as if father's ten-acre lot had been suddenly shoved up two hundred feet in the air, where it stood for a moment, a quivering mountain of snow, some peaks towering many feet higher than others." Whatever else was shot up, nothing was seen but the foaming waters which suddenly leaped out of the great fissures opened above them. When these fell back, and Flood Rock with a part of the huge derrick and other appurtenances were still visible, those who expected the whole to be blown out of sight, were evidently disappointed, and some hastily pronounced the undertaking a stupendous failure. But those most interested, and whose reputation for science and skillful engineering was involved, declared themselves perfectly satisfied. They expected only to break the rock and make its subsequent removal practicable; and, knowing that more space is occupied by a rock when broken to pieces than when solid, they rather

expected to see more of the surface above water than before. If really broken, as they hoped and now know it to be, the fragmentary rocks would fill more than the space excavated; and the lower strata, being, as was intended, more thoroughly crushed, would for a time, rather raise the surface portion, but, torn away by the rushing tidal waves, and especially when released by the removal of the larger masses which can be disposed of by dredging, they will mostly disappear. Some farther use of the drill and blasting may be necessary, and months, if not years of labor, to secure the required depth in the channel. But the practicability of the enterprise has been demonstrated, and its complete success is now only a matter of time. A very general and profound satisfaction is felt in the work so far as already accomplished. From its inception to the present time, science, judgment, and practical skill have presided over all its details. Some unjust and preposterous criticisms have been made; but General Newton, an officer of ability and experience, with his principal assistants under whose careful inspection the work progressed, are deserving of much honor, and have made for themselves an enviable reputation in their profession. If proper to compare works in many respects so different, the engineer who overcame the difficulties of constructing that immense mine under the river, has done a work which may prove scarcely less important than the famous bridge which, at greater cost, was thrown over it to unite the cities, making them as one. Never before in the history of naval engineering was such a mine constructed, and never was the mighty power of so vast an accumulation of explosive materials made subservient to an important, practical purpose. Flood Rock once out of the channel, that gate of sinister name, the scene of many a dismal shipwreck, will be passed with comparative safety, and a great increase in the number and tonnage of the vessels reaching and leaving the harbor by way of the sound, may be expected as the natural result.

There will still remain other though less formidable obstructions in East River, which will be successively the objects of attack, till the whole, either by shaving down or blowing up, are removed. A broad, deep, unobstructed channel once secured through the hitherto dangerous strait, and proper regulations instituted to prevent collision with smaller crafts so numerous in the sound, European steamers may often take that route in coming to and leaving the port. Thus they would considerably shorten the passage, avoid detention by the bar at the entrance, and by shoals in the lower bay, and the danger from rough weather on the Long Island coast.

Among the first questions asked by those at a distance was: "How were buildings in the vicinity affected by the shock?" There was, I think, a somewhat general apprehension that things in the neighborhood of the mine would be terribly shaken, and that the bill for damages might be inconveniently large. And such would probably have been the case if that quantity of dynamite and powder had been exploded above the earth's surface. The engineers, of course, expected nothing of the kind, and knew just where to allow the mighty forces they employed to do their work. For obvious reasons, the heaviest charges were placed in parts of the mine where the rock above them was thinnest, but in the deepest water. It was comparatively safe here to break it into the smallest possible fragments. But to have mined as near the surface where the rock was exposed, and to have placed as heavy charges beneath it would have been extremely hazardous, not only because it could not be told in what direction, or how far the fragments would be hurled, but the concussion in the atmosphere would be more violent and destructive. Two things were desired and intended—to so thoroughly crush the whole rock under deep water that the strong currents would dispose of it, while they would only start and crack the part above, so that the dredge could handle it. Both these, it is claimed, were done to the full extent expected.

General Newton's idea, as outlined to a *World* reporter, includes the removing of all obstructions from the strait, and, at some future day, a safe harbor for the northern part of the city. Competent judges think it by no means improbable that before the close of the present century a large part, at least, of the increase of New York's shipping trade will be transacted near the upper part of the island. If the increase is as rapid

in the next, as it has been in the present decade, before 1895 many steamers must find berths farther up town, or suffer inconvenience from the often crowded state of the docks in the harbor.

When the Harlem Canal is completed, and some other improvements made, the north end of Manhattan Island may become as populous as any other part of it.

THE NATIONAL MUSEUM.

BY G. BROWN GOODE.

FIRST PAPER — GENERAL CONSIDERATIONS.

I.

The museum idea is almost as old as civilization itself. The *museion* of the Greeks, whose name has in modern times been inherited by institutions of a different character, was, we are told, a temple of the muses — a place dedicated to philosophy, literature, and the arts.

In the days of the revival of letters, the new culture being mainly of Greek inspiration, the attention of western Europe was devoted to reassembling the treasures of Grecian art, and it is not strange that collections, public and private, should have been built up, especially in Hellenized Italy, which with their treasures of sculpture, pottery, engraved gems, and manuscripts, well deserved to be called by a Greek name. George Eliot in *Romola*, has well described a museum of this kind, and its collector, and every one knows what avaricious and fastidious collectors of antique objects there were in the days of the Medicis.

The British Museum with its wealth of statuary, pictures, gems, books, manuscripts, and other products of the arts of civilization, more nearly resembles than any other institution in English-speaking lands, the classic home of the muses, although it has really grown up around a natural history collection as a nucleus.

The museum germ belongs, however, to a still earlier period in the history of civilization,—to a time when the forefathers of all the Aryan races were barbarians, and when spoken languages were perhaps unknown. It was, no doubt, contemporaneous with the origin of the art idea. The rude man who carved upon a bone the likeness of a mammoth or a reindeer, and kept it in his cave or his hut or his tree to explain to his neighbors what he had seen in some remote region, was the first teacher of science; his neighbor who preserved this picture as a curiosity, was the first collector, and one of the earliest exponents of the museum idea.

From then until now, the ideas of culture and of museums have been very closely connected. Every assemblage of objects which are preserved on account of their beauty or their suggestions rather than for their direct utility, is, so far as it goes, a museum, and, unless gathered for purely commercial purposes, is a source of refinement and mental improvement not only to its possessor, but to those persons who, either from egotistic or altruistic motives, are certain to be asked to share the pleasures of beholding it.

There are many races of men, commonly believed to be inferior in culture to our own, who collect and preserve the objects which seem to them lovely and curious, and our own museum keepers are always eager to enrich their institutions from these private treasure houses, whether they be among the Hyperboreans, the Indians of the pueblos, the Japanese villages, or the temples and palaces of Hindoostan.

The passion for preserving rare objects is to a certain extent inherent in human natures, especially in those whose circumstances are such as to permit them to indulge in it. Power and wealth, until very recent times, have always been monopolized by the rulers of the people, and the origin of the museum

must be sought for in the treasure homes of monarchs, such as are referred to in the history of a very early day. The collection of King Ahasuerus was one of the earliest of museums, and the palace of Ptolemy at Alexandria, was a prototype of the modern museum of art and industry. With the more general dissemination of wealth among the people, collectors have become more numerous. Every home is in these days something of a museum. Perhaps the accumulations consist of some shells gathered on the sea-shore, a celt, a few arrow-heads plowed up on the farm, and a bright crystal or two, or it may be, among the younger members of the household, a book of stamps, a bag of coins, a case of eggs or insects; but perhaps on the other hand, the collections, like those of Sir Walter Vivian in Tennyson's "Princess," include

"Huge Ammonites, and the first bones of Time:

And on the tables every clime and age
Jumbled together; celts and calumets,
Claymore and snow-shoe, toys in lava, fans
Of sandal, amber, ancient rosaries,
Laborious orient ivory sphere in sphere,
The cursed Malayan crease, and battle-clubs
From the isles of palm."

Whether trivial or priceless, their owner is a gentler, more thoughtful man than he would be without them.

II.

The public museums are the outgrowth of the work of private collectors, and have always been depositories for works of art and curious manufacture. The temples of Athens, Ephesus, and Delphi were art museums, and so are many European churches of to-day. With the growth of liberal government, more liberal and comprehensive ideas as to the use and value of such materials have sprung up, and they are now recognized to be the property of the nation. Private individuals have often devoted themselves to the accumulation of collections which, either by design or in obedience to a natural law recognized and sometimes expedited by museum officers, have found a resting-place in public halls. The Ashmolean Museum at Oxford was the result of Sir John Tradescant's life-long toil.

The tendency of modern museum work is in three directions, namely, (1) the record of the past, (2) the preservation of materials for investigation, and (3) the education of the people. These ideas, coöperative and mutually helpful as they are, are essential to the development of any comprehensive and philosophically organized museum. Materials are gathered together that they may serve as a basis for scientific thought. Objects which have served as a foundation for scientific study, or which, from their historical significance, are treasured up and preserved from destruction that they may serve purposes of record, permanent land-marks of the progress of the world in thought, in culture, or in industrial achievement, are not only records of what has been done in the past, but constitute the most valuable of all materials for future study. The museum of record is not only an accessory to the museum of research, but an adjunct which accomplishes similar and fully equal results in the same direction.

The contents of the museum of research and the museum of

record, if no objects are sought other than those already mentioned, might without impropriety be stored away in vaults and cabinets, inaccessible to any except specialists. To give them their highest value, however, they should be administered upon in such a manner that hundreds of thousands of people may profit by their examination instead of a very limited number; and they should afford a means of culture and instruction to every person, young or old, who may have opportunity to visit the place in which they are preserved.

The modern museum of research seems to have originated within the last three or four centuries, and, perhaps, to have been one of the results of the promulgation of the inductive philosophy. The collections gathered by Linnæus, those of Sir Hans Sloane, which formed the nucleus of the British Museum, and of Buffon and Cuvier and their collaborators, as a beginning of the natural history museum of Paris, were among the earliest of this class. The museum of comparative zoölogy at Cambridge, founded by the elder Agassiz, is one of the most characteristic and flourishing of this class.

III.

The educational museum is of much more recent origin, and may be considered as one of the outgrowths of the modern industrial exhibition. The world's fair, of London, in 1851, the first of a long series of international exhibitions, was utilized by the government of Great Britain as a starting point for a number of national and educational museums, the most perfect which have as yet been organized; and the subsequent world's fairs have been utilized in a similar manner, so that nearly every civilized country now has museums of this description.

The systematic exhibition of the products of the earth and of human industry for the instruction of visitors, the improvement of the public taste, and the fostering of the arts of design, had not been attempted, probably not thought of, thirty-two years ago. The gradual deterioration of industrial exhibitions, the predominance of commercial features in those which have been attempted of late years, the growing difficulty in securing the attendance of exhibitors, indicate that they are of the past.

The demand is now for something better, more systematic, more definitely instructive in its aims — something which shall afford the same long vistas into the palaces of nature and art, and at the same time provide guide marks to explain their meaning.

It is to be regretted that many specialists, intent chiefly upon the study of scientific problems in which they individually are absorbed, are disposed to neglect the claims of the educated public to the enjoyment and instruction which museums afford. They do not hesitate to say that scientific museums should be administered for the benefit solely of persons engaged in research. At a recent meeting of professional naturalists, an eminent investigator in natural science publicly expressed his opposition to exhibiting certain scientific collections to "the gaping clowns who form the majority of the visitors to our museums." Such a spirit defeats its own purposes, and such a remark deserves no answer. The experience of Europe with its magnificent educational museums, and the history of the several expositions in the United States should be quite sufficient to satisfy any one who has studied the matter that the museum is an educational power even more influential than the public library.

The venerable director of the South Kensington Museum, Sir Philip Cunliffe Owen, speaking from an experience of thirty-five years, not only in his own establishment, but in the work of building up the magnificent system of museums controlled by the science and art department of the British government, located in the various provincial towns of Great Britain, remarked to the writer: "We educate our working people in the public schools, give them a love for refined and beautiful objects, and stimulate in them a desire for information. They leave school, go into the pursuits of town life, and have no

means provided for the gratification of the tastes which they have been forced to acquire. It is as much the duty of the government to provide them with museums and libraries for their higher education, as it is to establish schools for their primary instruction."

One of the most important results of the Philadelphia exhibition of 1876, was that it made plain to the people of the United States the educational importance of great museums, and stimulated their interest in such institutions. It suggested to the observant the thought that, if so much that is inspiring and instructive can be imparted by the display of objects gathered together chiefly with commercial ends in view on the part of the exhibitors, necessarily somewhat unsystematically arranged and with little effort toward labeling in an instructive manner, an immense field was open for educating the public by gathering together a selected series of similar objects, which may be so classified and explained, that they shall impart a consistent and systematic idea of the resources of the world, and of human achievement. The educational museum being, as has been already remarked, of comparatively recent origin, and the efforts of thoughtful men in times past having been chiefly directed toward the building up of museums of research, it is not at all strange that natural history museums should be so common, while those illustrating the history of mankind are so rare. The importance of the natural history museum from the standpoints of science and industry can scarcely be over-rated. A museum of culture must, however, be admitted to possess equal importance to the philosopher, and to be of greater value for the education of the public at large.

IV.

The majority of visitors to any museum go thither for amusement, or are actuated by praiseworthy curiosity. Many have no desire to gain instruction, and even if actuated by such a purpose, would fail to accomplish their object by a visit to any ordinary museum. This is due in part to the fact that where so much duplicate material is exhibited, the really instructive objects are lost to view, and that the objects in but few museums are labeled in a really instructive manner; but principally because the objects exhibited are not of the kind best adapted to the needs of the museum-visiting public. The visitors carry away only general impressions of rooms full of glass cases containing animals, minerals, and "curiosities," gathered by travelers among uncivilized races. Professor Huxley has defined a museum as "a consultative library of objects"; and this definition, true enough in itself as a description of the best ideal museums, is unfortunately too true a description of all. Most collections are as useless and little instructive to great masses of our people, who know not how to use them, as are our libraries of consultation. The museum of research, since it is intended chiefly for investigators, should be the consultative. The educational museum should resemble a great cyclopedia, rather than a library full of learned volumes. Every library of importance, however, contains the cyclopedias for the general reader and the monographs for the scholar. The larger public museums may in like manner be adapted to the needs of both students and general visitors.

To overcome the difficulties in the way of this adaptation, many steps must be taken which are not usual in museums. By far the most important of these is in the direction of thorough labeling.

An efficient educational museum, from one point of view, may be described as a collection of instructive labels, each illustrated by a well-selected specimen.

There are many obstacles to the effort to build up a museum upon this basis. Museums which exhibit only such objects as are in themselves beautiful or marvelous cannot fail to be attractive, no matter how poorly the objects are arranged and labeled.

When, however, the objects depend for their interest upon the explanations on the labels, and upon the manner in which

they are placed, relatively to each other, a responsibility a hundred-fold greater is entailed upon the curators. The materials of such a museum may be compared to piles of brick, stone, lumber, and architectural ornaments, which by themselves possess little apparent interest, but which may by thought and labor be combined into an imposing and useful edifice.

V.

Certain cardinal principles may be announced which should be considered in the arrangement of every educational museum: (1) Every article exhibited should illustrate an idea, and no two objects should be shown which illustrate the same idea in a similar manner; (2) the idea which any object is intended to illustrate should be explained upon its label in such a manner that any intelligent visitor, without previous special knowledge of the subject, may be able to learn (a) why the object is shown, and (b) what lesson it is intended to teach; (3) the objects should be so carefully classified that their relations to each other may be recognized by the visitor, so that, taken together, they shall suggest general conclusions; in the formation of these conclusions he should be aided by certain general or collective labels which relate to and describe groups of objects in a manner similar to that in which the individual labels describe separate articles; (4) the labels, individual and collective, should be supplemented by guide-books and manuals for special departments, which shall contain, arranged systematically, all the information given upon the labels, and which shall be illustrated by engravings of the more important objects.

Industrial museums, as a rule, exhibit only those articles which are designed and constructed in the most sumptuous manner—the armor of kings and knights, the furniture of palaces, the most artistic of metal work, stone work, and wood work. The ethnological museums, on the other hand, admit only the implements and costumes of savage and partially civilized races. Between the two there is a great chasm to be filled. It is as important to preserve in museums the more humble and simple objects which illustrate the domestic economy and customs of the masses of the people of civilized nations, as to search for similar objects in distant lands, or to treasure up only the objects which, on account of their cost, are seen and used only by the most wealthy and luxurious classes in the civilized community.

Collections of this character are, perhaps, as well entitled to be called "anthropological collections" as similar collections which are intentionally more limited in their scope, to supply the place of objects too large to be placed in a museum, too evanescent to have been preserved, or which, on account of their rarity or neglect in preserving them at the time when they could have been obtained, are necessarily lacking in the collections, it is essential the museums should assume the administration of great quantities of material such as is usually consigned to the library or to the picture gallery. Otherwise, deficiencies in groups of objects, which should illustrate by their collective meaning a general idea, will much impair their value. Pictures and diagrams should be freely used as temporary or permanent substitutes for specimens which may be lacking, and also to supplement and explain the descriptive labels. In many sections it may be impossible to exhibit anything but pictures. It is needless to point out the difference in the influence of a series of plates, like those, for instance, in Audsley and Bowes', "Keramic Art in Japan," the publications of the Arundel Society, the autotypes of Braun, or the illustrations of many ethnographic works if displayed in a public museum, where they are seen daily by thousands of visitors, or hidden except from the initiated few in a library, where they are practically accessible to students only with abundance of time and training in the use of books.

Much of the material usually shown in art galleries and art museums, such as is ordinarily used to illustrate the history of

art, or is preserved on account of its artistic suggestions, may be displayed in a much more instructive manner in a museum without in the least lessening its value to the artist or designer. Portraits, pictures of buildings, of costumes, of geological features in scenery, of ceremonies, and of social customs, may be arranged and administered as anthropological specimens. In addition, much may be accomplished by having standard works, relating to the special departments of the museum, placed in convenient places in the exhibition halls, and, if necessary, fastened to desks in such a manner that they could not be removed, while easily accessible to any person who might wish to become informed upon special topics relating to objects being examined.

VI.

The United States has as yet no system of educational museums, although there are several museums of limited scope which have successfully carried out the educational idea in the arrangement of their materials; for instance, the American Museum of Natural History in New York, the Museum of Comparative Zoölogy in Cambridge, the museum of the Peabody Academy of Sciences, in Salem, the Philadelphia Academy of Natural Sciences, the Boston Museum of Art, the Metropolitan Museum of Art in New York, the Pennsylvania Museum of Industrial Art, the Peabody Museum of Archaeology in Cambridge, the Peabody Museum of Yale College, and the Boston Society of Natural History.

The same remark applies with equal force to the museums of Europe. There are now institutions, like the Museum of Practical Geology, the Museum of the Royal College of Surgeons, the museums at Bethnal Green and South Kensington in London, the Museum of Industrial Art at Berlin, the Ethnological Museum at Leipsic, the National Museum of Germany at Nuremberg, the Bavarian National Museum at Munich, and others, which have admirably carried out a single idea, or a limited number of ideas, and which are marvelously rich in material and arranged in a manner full of suggestiveness.

It may safely be said, however, that all the museums of anthropology, and industrial art now in existence are either by design or chance, limited in their scope.

The museum is yet to be organized, which shall show, arranged according to one consistent plan, the resources of the earth and the results of human activity in every direction. This has not yet been done, even for a single country.

The educational museum being, as has been already remarked, of comparatively recent origin, and the efforts of thoughtful men in times past having been chiefly directed toward the building up of museums of research, it is not at all strange that natural history museums should be so common, while those illustrating the history of mankind are so rare. The importance of the natural history museum from the standpoints of science and industry can scarcely be overrated. A museum of culture must, however, be admitted to possess equal importance to the philosopher and to be of greater value for the education of the public at large.

The National Museum of the United States now under the charge of the Smithsonian Institution, has through the action of influences beyond the control of its management, in fact by the terms of the act of congress which authorizes its existence, been made the depository of collections in every department—geological, botanical, zoölogical, and anthropological, and its work has, of necessity, been organized upon a very comprehensive plan.

There can be little question that this museum can, with proper management, be made, in the course of a few years, one of the most comprehensive and instructive in the world. While it may not be possible to gather together such treasures of art and industry as are in the possession of the government museums of Europe, it is not unreasonable to hope that examples of every kind of object available for museum instruction may be acquired, and that this museum may be able, by

means of a thorough classification, and as a result of the absence of the enormous masses of duplicates, which are sure to incumber any old museum, to illustrate the history of human culture and the structure of the earth and its inhabitants better than has ever before been done.

In this first paper an effort has been made to discuss the general principles underlying the work of every large museum; in that which is to follow, the writer will endeavor to show what has actually been accomplished in the museum at Washington, and what is being done with reference to the future.

ATHENS UNIVERSITY AND ACROPOLIS.

BY BISHOP JOHN F. HURST, D.D., LL.D.

No European city of ancient birth is putting on more youthful robes than Athens. My two or three days here were divided between the old and the new. They lie in strange brotherhood everywhere. You stumble over cobble-stones over which the tranquil Plato walked out of the city to his Academe, and your ears are deafened by the whirl of sewing machines. You see the queen, beautiful and bright, riding up to the palace gate, and whirling around to the door that leads up to her part of the plain palace; but in five minutes you are picking your way over the little Ilissus, and clambering over the very rocks where once played the boys who afterward won Marathon, and died at Thermopylae.

For one, I have become bewildered. The language is existing. I stopped my munching, and read the whole bill of fare in a Greek restaurant. You can find the *Iliad* and the *Phædo* beneath the names and the prices for fried eggs, veal-cutlets, and potatoes swimming in olive oil. The fact is, the language is the most enduring thing here. There is less of waste and wear in this very Greek speech, with all its impalpability, than there has been in the spotless marble of the Parthenon, or the firm hillside at the stadium. Happy the Greeks, that they have lost so little of their old Attic tongue. In one month, with a guide, and mixing only with the natives, one can make himself, through the sole aid of a good knowledge of the ancient Greek, able to read the new Greek at sight. The sounds are the most troublesome factor. As to the vocabulary, Messrs Liddell & Scott will be enough to help you read the last account of a murder up in Macedonia, or the prices at the Athenian stock exchange, or the prospects of the next current crop at Corinth. You can ask for postage-stamps at the window of the post-office here, in the same language in which Aristophanes cracked his jokes in the *Frogs* and *Clouds*, and the man will give you what you want, and your bright new stamps will show you the winged bust of Mercury, and the same word, *lepton*, which Socrates had to listen to when the baker told him the price of his barley loaf. You order your passage on a Greek steamer to Italy in about the same language that Plato did, when he engaged his bunk for Alexandria, and took with him some of the books which he used when a student in the Heliopolis of gray old Egypt.

THE UNIVERSITY.

The University of Athens is steadily growing. My interest was first in the library which is constantly undergoing improvement. The librarian is a German, for growing Greece is still too young to depend entirely upon its native brains. Even its king, George, is an importation from Denmark. Still, the approach is toward independence. The Athenian and the Grecian are intruding constantly on the foreign. The last trace of the wretched Turk is disappearing. That miserable despotism is regarded by the Greek as the dark and deep captivity, and it is fading even as a bitter memory. The university, in its new shape and with its large corps of professors, is one of the direct results of deliverance from Mohammedan chains. Why is it that nations always make it their first effort to build great schools when once the last clank of their chains has been heard? Berlin sprang out of the deliverance at Waterloo, as Leyden University had done from the escape from Alva, when the siege of Leyden was raised, and the bells

rang out the birth of the Dutch republic. One of the leading professors in the theological department is Damalas, a thorough Greek, who reads on New Testament exegesis. Here, in the theological course, the priests are trained for service in the Greek church. The lecture of Damalas which I heard, was cast in a strange mold, while the manner was entirely new. There was nothing of the sparkle and fire which one would naturally expect in a Greek. The professor, a man of about forty-five, with dull and heavy appearance, read slowly from a copy of the Greek Testament, the seventh chapter of the Acts, and every now and then stopped, and made comments on the passages which required, as he thought, exposition. He used no manuscript. His words were carefully chosen, and there was a vein of quiet good-nature pervading his entire lecture. He referred occasionally to other authors, such as Gesenius, but his references were to the older philologists, and such as are removed from intense Protestant affinities. It would not do, in Greece, and before future priests of the Greek church, to recognize very fully the weight of Protestant scholarship.

There were about fifty students in his room, and while it would be expected that all would take notes, only about ten really took down the professor's expositions. Without doubt, they are at liberty to write or not, just as in the German universities; the main point is the later examination. If one is prepared, no questions are asked as to how the perfection is reached. At a certain point in the exposition, the professor paused and asked one of the students a series of questions. Then the exercise took the form of mutual catechizing. The professor was careful to answer the student's questions, and to be well aware that, sometimes, even a Greek student cannot always conceal his want of preparation by an adroit questioning of his professor. No other student was asked a single question. The sole interchange was between Damalas and this one of the fifty. I judged that this one had been designated at the previous hour to have his own preparation in the chapter, for he was evidently expecting the "quiz" which Damalas had in store for him.

Who would believe it? Here in Greece, with all the memories of the classic magnates thrusting themselves upon you at every step, and with all the prejudices of the Greek church against Protestantism and its work, the theological students in the lecture room of Damalas use the little volume which contains the Greek text, published by the British and Foreign Bible Society. This I happen to know, a student having handed me a copy with which to follow the exegesis. Having a suspicion, I looked at the title page, and found it to be true. What is there against such use? Not a thing. They do right. What easier or better plan, or cheaper withal, than that young Greek priests should drop into the salesroom of the British and Foreign Bible Society, and for a few *lepta* buy a pocket edition of the New Testament in their own language? Greece going to Protestant London for a text-book with which to teach Paul's travels in Greece itself to the priests of her national church? What a turning of the world upside down!

Now, in an ordinary library I think it not difficult to tell from the exterior, a copy of the eighth edition of Tischendorf's New Testament in Greek. Unless my eyes deceived me, this is the very book which Damalas used in his exposition.

of this seventh chapter of the Acts of the Apostles. I had no way of finding out the correctness of my supposition. If Damalas did use it, to give his students the benefit of the best text in his own language, he showed his good sense. It would be only another tribute to Protestant philology.

Great pains are taken in the publication of the catalogue, examination programs, and all other needful documents bearing on the *personnel* and work of the university.

There are four faculties—theology, law, medicine, and philosophy. In theology the professors are Damalas, Kuriakos, Paulides, Roses, Loukras, Moschakes, Oikonomides, Mesoloras, and Derbos. Exegesis, apologetics, homiletics, symbolics, and historical theology are the chief departments. In the four faculties there are sixty-four professors. There is a large margin given to the philosophical department. Here in Greece, as well as in Germany, anything that cannot be classed under the three heads of theology, law, or medicine, is placed under the philosophical rubric. For instance, in the Athens University, mathematics, philology, and physics come under this head. Even pharmacy is ranked as a philosophical study.

There are 2,096 students in attendance. Students are the same here as everywhere in the world. They wear a dress that marks them as of the same class. No doubt it was the same in the old days. Even when Cicero came to Athens to study, there was, probably, not a boy in the streets who could not pick him out as a student. The very priests who listened to the lecture of Damalas, had their own dress, that of the general priesthood of the Greek church—the stiff and high, black, cylinder caps and long robe of black serge. I noticed, however, that Damalas himself wore a soft felt hat, just such as he might have dropped into a Meadville hatter's and bought. The truth is, the felt hat is fast driving out the silk stove-pipe all over Europe. In Bucharest, Roumania, the silk hat is still the mode. The same is the case throughout Italy. But in Germany, while the silk hat still holds some sway, its empire is doomed.

The library of the university is the first important possession, as it is not only large, but especially rich in MSS. Then come the Numismatic Museum, the Physiological Museum, the Botanic Garden, the Clinique, the Anatomical Museum, a hospital, and an observatory. Its invested funds now amount to one million and two hundred thousand dollars, and its income is one hundred and ten thousand dollars.

THE PARTHENON.

The first sight one gets of the Parthenon after the steamer has glided past Sunium, and then into the Piræus Bay, is always a joy. I remember how delighted I was when, years ago, I had feasted upon this historical hill, and how Dr. Long and I clambered up its steep sides about every day of our Athenian week. But even the Parthenon, with red granite below and pure Pentelican marble above, changes too. There are new revelations constantly coming to the light. The base on the southern side has been made bare, and you can now see just where the priests sat on the front row in the theater, and can read the names of the holders of many of the seats further back. You can see the entire outline of the stage and the seating space for the audience, and fairly see every place for the members of the orchestra.

You have no difficulty in imagining how the great throngs filed into the marble structure, with the lofty natural acropolis in the rear, after some great victory had been achieved on land or sea, and how Æschylus, Sophocles, or Euripides gave voice to the natural enthusiasm, and the multitude burned to see in play what they could not see in work. The arms of the marble chairs are smooth through the resting arms of the seated spectators of the far-back centuries. The edges of the steps are worn by the soft sandals of half-forgotten generations. Wonderful are these new views. There is hardly a trace of the old locations of fifteen years ago. There have been so many invasions of the dead underground,

so many missing links supplied by the pick and spade around the southern base of the Acropolis, that not only here, but in its height, and all over the Athens of to-day, this whole city is practically new, because its funeral drapery has been largely taken away, and it can now tell a fuller story of the old and the dead. Gay hours were those in this chief Athenian theatre, nestling under the butting cliff of the Acropolis. Mrs. Browning, in her "Wine of Cyprus," tells how the people looked back upon the wonderful days:

Then what golden hours were for us
While we sate together there.
How the white vests of the chorus
Seemed to wave up a live air!
How the cothurnus trod majestic
Down the deep iambic lines,
And the rolling anapæstic
Curled like vapor over shrines!
Oh, our Æschylus, the thunderous,
How he drove the bolted breath
Through the cloud, to wedge it ponderous
In the gnarled oak beneath!
Oh, our Sophocles, the royal,
Who was born to monarch's place!
And who made the whole world loyal,
Less by kingly power than grace!
Our Euripides, the human,
With his droppings of warm tears,
And his touches of things common
Till they rose to touch the spheres!

Our little party, Professor Van Benschoter, Rev. Mr. Fox, Mr. Eckfeldt, and myself, passed from the theater to the site of the Odeum, the great structure for song. Not much is left here of the ancient edifice, reared by the public spirit of Pericles, and covered by a roof made of the spars and masts of the Persian galleys, so shaped as to resemble the tent of Xerxes, whose hopes were blasted and whose army was wrecked out yonder in the bay of Salamis.

We now pass through the gateway, amid a world of fragments of capitals, and statues, and vases, and climb up the left-hand pathway toward the broad, flat space on the top of the Acropolis. This Acropolis is a hill of granite which rises three hundred feet above the city, is precipitous on all sides except the west, where it slopes toward Mars Hill, and connects the two. The top of the Acropolis is one thousand and one hundred feet in length, and four hundred and fifty feet broad at its widest part. Once it was a place of mean dwellings, above which rose two temples. Neptune was the favorite god, and to him was the chief worship, for Athens was a child of the sea, and must honor its paternity. But gradually wisdom took the place of this sacred memory, so Minerva became the great goddess of the priceless hill. When Xerxes failed to conquer Greece, and the east was for ages doomed to let Greece alone, until at last the accursed Turk came, all the dwellings and poor buildings were swept away, and the entire great space was devoted to sacred uses. Temple after temple arose, the wonderful Parthenon rising above them all, and still, down to our day, looking down from its splendid columns upon the world of ruin grouped about it, and lying far out to the very edges of the broad space.

The Propylæa, or gateway to the Acropolis, was a splendid structure, in part for defense and in part a rich adornment of this marble paradise. It was lofty, and built in such taste that all who passed through it were well prepared for the grand creations which were afterward to greet them. The floor of the Propylæa, of pure marble from Pentelicus, is still undisturbed, while the portal itself is so nearly complete as to tell its own story of the dim and grand past. Its sides, smoothed by the robes of millions as they swept through the portal for ages, make you stop and pass your hands over them, and think of

other days when Greece was the world's queen, and Athens her joy, and the Acropolis her choicest shrine. The pavement beneath this great historical gateway has still two deep ruts in it, cut by the chariot wheels which moved in to swell the joy of the Panathenaic jubilee. This white pavement is one of the most eloquent witnesses to the ancient glory of the Acropolis. It still has some transverse cuttings, made to keep the horses from slipping in their upward passage to the broad horizontal a few rods beyond. Here, to the right of the Propylæa, Mr. Eckfeldt took me to an obscure corner, down a slight declivity, where I saw a part of the original Pelasgic wall, when Greece was only a group of wild tribes, and Athens a mean village for fishermen, and the future greatness lay not as yet, even as a dream, in the wildest brain in all the land.

Enough of the Parthenon still remains to tell you exactly the original shape. You have its whole outline—enough of its still erect pillars and general structure to learn to an inch all its dimensions. Pericles had it built, and Ictinus and Callicrates were its architects. You know every step by which the ancient worshipper ascended and entered the shrine, and you can sit down in it, and lose yourself in thought, and wonder if it is really you who are there, or some old Greek who had seen the ships of Xerxes go down out in the bay, and had lost his way from very joy, and had forgotten things, and fallen asleep, and had now waked up again and found himself, in the March sun of 1885, resting on one of these steps of the Parthenon. No purer marble ever lay asleep in a quarry than that in this temple to Minerva, the Virgin, and from which were wrought into perfect shapes these strange dreams of beauty.

The temple is a parallelogram two hundred and twenty-eight feet long and one hundred and one broad, and sixty-six feet to the top of the pediment. Each of its sides is approached by a flight of marble steps, and so easy and gentle is their appearance that you are drawn toward them, and look upon them with a sense of restfulness, and ascend them with a feeling of relief. At the top of these steps comes the row of great Doric pillars, which follow the line of the temple on all its four sides. This is the peristyle of architecture. There are sixteen of these pillars on each side and eight at each end. Then comes the main building, with its three divisions. The outline, notwithstanding the thefts and wreck of the long centuries, is precisely clear. You see just where the very altar stood, and the groove in the pavement where the blood of the victims flowed away. The statue of Minerva was a rich creation, It was the heart of Greece and of the whole age when she reigned from the dim East to the Adriatic. This statue divided, with that of Jupiter at Olympia, the empire of the world's best

sculpture. Both, however, sprang from the brain and hand of Phidias. All the undraped parts were of ivory, while all the clothing and ornaments were of solid gold. Phidias so arranged the drapery that, should the gold ever be needed for the state, it could be removed without injury to the statue. It is said that when the drapery was complete the charge was made that the architect had pilfered some of the gold, but that he overwhelmed his accusers by taking it off the statue, and weighing it in their presence, proving that, to an ounce, it was all there. The statue was thirty-nine and one-half feet high; it had a pedestal in which was cut an image of Pandora and of twenty infant gods. A shield, both sides of which were filled with carvings of mythological conflicts, lay at Minerva's feet, and on her head she wore her helmet, with a sphinx at its top and griffins on either side. In her left hand she held a spear, while on her outstretched right she supported an image of Victory, of four cubits in height. The whole floor of the temple was covered with Parian marble, it being more transparent than Pentelican, and therefore softer and more relieving for interior light to fall upon.

What is the general effect of this great view? In the days of its complete splendor, when all was ablaze with the triumphs of Greek genius in its highest flight, and when the grand frieze of Phidias looked down from its height, fighting gods and men, a startling magnificence may have been the first thought of one who saw it all for the first time. But I suspect that a sense of soft and delicate harmony succeeded the first surprise. That, in truth, is the first and last feeling you have of the thing in view. The idea of gentle and graceful proportion surpasses all else. There seem to be no sharp and cutting angles. I put my head down to a line with the level of one end of a step running the length of the building, and could not see the top of a high hat resting on the farther end. Every step has a curve. I tested the fluting of a column, and behold the groove was convex, and I could not see, by sighting it at the base, the upper end. It was buried out of sight. It is said there is not a straight line to be found anywhere in the Parthenon. All is in curves. Yet so skillfully are these convex lines drawn that you would never suspect them. You get the grace and symmetry, but you little suspect a chief cause. The architect had looked out upon the islands, and seen their gentle slopes, had followed the lines of Salamis, and the sweep of the coast around to Corinth, had looked landward upon Hymettus and Lycabettus, and the plain stretching off to Marathon; and nowhere could he find a sharp angle or a straight line. So, when he reared the Parthenon he followed nature's curves. He had caught her secret and embalmed it in his marble triumph.

"PEACE ON EARTH."

BY MRS. EMILY J. BUGBEE.

Thro' the cold and crystal starlight,
List! the silvery echoes fall,
Of the olden song of angels,
"Peace on earth, good will to all."

"Peace on earth" though conflict shaken,
Reels the old earth on its way,
Still the cradle song of Jesus,
Holds its wondrous, mystic sway,
To each human heart that listens
To the grandeur of its flow,
And in penitential sorrow,
Seeks the hidden truth to know,
This prophetic song of angels,
Is fulfilled in sweetest power,
Though the clouds of human conflict
Darken still the Christmas hour.

Sometimes, bowed with mortal sorrow,
Seems the song a mocking strain,
Borne across the troubled ages,
Mindless of our human pain;
Some sweet myth the cherished story,
Of the lowly manger room,
From the ages dim and hoary,
Wrought within their shadowy gloom.
Patience, heart, though long unfolding
Is the lovely Christmas rose,
It will burgeon into beauty
And its glowing heart disclose.
So on wings of faith uplifted,
Let us join the glad refrain,
Of the happy Christmas carol,
Floating down to earth again.

SCIENTIFIC FARMING.

BY FELECIA HILLEL.

It is not exaggeration to say that more people know how to read Greek and Latin tolerably well than know how to observe natural phenomena intelligently and record them accurately. Yet there is not a more valuable or practical accomplishment. In the line of pleasure alone, no power which the mind cultivates affords keener enjoyment, is more absorbing, or can be used at more times and places. As a social power it is of immense advantage, furnishing conversational topics of a general nature, and arousing an interest in people and things which the average person feels slipping from him with each advancing year. More particularly in matters of practical interest is it of service.

Each year gardening and farming are coming to be more common. It is beginning to be generally recognized that people who live in the natural way, that is, under the home system, must farm. The home is not complete without at least a garden patch where a row of celery, a few strawberries, an onion-bed, and early lettuce may be cultivated. Like the piano, the dumb-waiter, and the best magazine, it is a necessary auxiliary to the home. Now to be a successful gardener or farmer, quick observation is an essential. To do anything like scientific farming, no power should be more highly trained than this of observation. But there is no power of the mind for which our system of education so poorly provides. If young people learn to see at all, it is from some natural bent, from the companionship of an observer, or from hints which they have been fortunate enough to receive by chance. It becomes a mere matter of luck whether boys and girls, and consequently men and women, shall go through the world, blinded to the beauties, curiosities, and practical benefits in nature about them, or not. Any attempt to offer to people systematic training in observation, must be heartily welcomed.

The attempt which is now being made at Houghton Farm, Mountville, Orange Co., N. Y., on the line of the Erie railroad, to do something of this kind, is meeting with large success. Houghton Farm is run on scientific principles. Experimental, it tries nothing but what strict science declares to be reasonable. Out from these headquarters work is sent to all those who join the club, and directions are given for pursuing the work. The advantage of the experience and training of the workers at the farm belong to the club, and is freely given.

The following paragraphs give an idea of the nature of the work:

"Rule on a sheet of letter paper thirty-one vertical lines quarter of an inch apart, and number at top from one to thirty-one. Rule over these, half as far apart, sixty horizontal lines, and number upward from thirty to ninety. Place a dot at junction of horizontal line corresponding to height of thermometer and line for day of month, each day at 7 a. m. The observation should be made daily at exactly 7 o'clock. At end of month, join all the dots together by straight lines.

"Report at same hour each day, direction of wind, by placing initials for wind at foot of vertical line for No. 1. Work No. 2 also goes well with No. 3, below. If preferred, write out wind record thus: 1st, N., 2d, W., 3d, N., 4th, S. W., 5th, E., etc. These initials are for the points of the compass from which the wind comes, in every case. If there is no wind, write O in the record.

"Rule thirty-one short, vertical lines quarter inch apart on sheet of letter paper, and rule over these, three horizontal lines; mark upright lines with days of month, one to thirty-one, and horizontal lines, Clear, Fair, Cloudy. Place a dot on junction of the line for each day and that for the state of the

weather; join all dots by straight lines. When one-third or less of the whole sky is clouded, the record should be "Clear." If from one-third to three-fourths of the sky is clouded, the record should be "Fair." When three-fourths is clouded, record "Cloudy." The observer should stand where the whole sky can be seen. Although any hour of the day may be taken for this observation, provided it be the same hour every day 7 a. m., is the time advised.

"Observe at any hour and record every day, some fact in regard to the weather, or any other natural phenomena, as explained in the program of work. The next page of this sheet is a good example of such a record, on a farm, for one month. Anywhere, in town or country, something can be found for record every day. Have a sheet with at least thirty-one lines on it, and give at least one line to every day. The following are some of the casual natural events which are worthy of record: High winds; storms; thunder showers; for all these, the time of occurrence, duration, and direction of motion. Distant thunder without visible lightning, and distant or "heat" lightning. Objects struck by lightning. Hail storms, time of occurrence, duration, size of stones, direction moving. Aurora borealis, or northern lights. Shooting stars. Latest frost in spring, and earliest in autumn; white frosts. Time of freezing of rivers, lakes, and large ponds. Appearance and depth of snow. Unusually heavy rains. Hazy or smoky appearance of the atmosphere. Smoke of forest fires. Time of budding, leafing, blossoming, ripening, and fading of plants,—especially agricultural plants—trees, fruits, etc. Time of appearance, nesting, disappearance or migration of birds, insects, etc. Occurrences of interest among domestic animals."

With these directions for observing temperature, wind, and rain, go sample charts. Numberless other varieties of work are planned, from which the members may take their choice. And what has been the result of all this planning? The actual reports, just as they came from the observers, will best show the result. The farm notes, the directions for which we have quoted, are favorites with members, and a fair sample of the way they are filled out is shown in this report from a member in Sombra, Ontario. The report is for July, 1885:

1. Cool. Moved stable, 16x24, against new barn (62x40.) Pasture is growing well; corn on the stand-still.
2. My first roses in full bloom. Drew in rest of June grass, seven loads in all, cut in pasture. Two-year old heifer *Pink*, one thousand pounds of milk in forty-four days.
3. Currants turning red. Wheat and timothy coming into bloom. Mowing clover meadow.
4. Went to Wallaceburg,—saw barley and oats on lowland hurt with frost of 30 ult. Elder in full bloom.
- 5 (S.). *Pink* to *Duke of Oldfield*. Weeds rampant. Clover passing its prime. Barley well headed out—rather dry.
6. Went to Sarnia. Heifer two-year old *Betsy*, one thousand pounds of milk in forty-eight days. Thunder shower in evening.
7. First young carrots for dinner. Golden wax beans in bloom. Potato seedlings looking fine.
8. Peas in garden, and China beans in bloom. Putting ashes upon turnips for the fleas. Potato bugs.
9. Cultivating corn for last time. Drew ten loads of hay into new barn, being first use of it.
10. Put Paris green in water on potatoes. Put two feeding funnels in barn above cow-stable—3x4.
11. *Cassie*, one year, nine days old heifer out of *Reddie* to *Blucher*. Wild orange or tiger lilies in bloom. Ten more loads of hay in. Droughty.

12 (S). First black raspberries ripe. Basswood in bloom. Not a honey-bee, scarcely any yellow-jackets. Young potatoes for dinner.

13. *Polly* to *Guy*, thoroughbred short-horn. Went to Orange demonstration at Wallaceburg. Great rain at night. George Mullin's barn burned by lightning.

14. Enclosing bottom of barn to keep fowls and pigs out. Weeding and hoeing carrots and other garden. Very few bumblebees this year.

15. *Reddie* calved, issue *Daisy* by *Peter*; she gave seven thousand six hundred pounds of milk last season. My first mushrooms for the season.

16. Went to *Euphemia*, drove through five townships; good crops; height of timothy-haying. Saw two large flocks of blackbirds.

17. Went to *Bothwell* and *Dresden*. Wheat nearly ripe but saw not one sheaf cut yet. Immense crop of hay.

18. Came home. Finished haying—fifty loads in all. Wheat filled remarkably well; had *Kersey* cut some wheat yesterday.

19 (S.). Black currants and gooseberries ripening. Green beans for dinner. Green peas fit to cook. Not so many birds as there were.

20. Sweet corn silked and blossoming. This is the hottest day of the month, going up to 96° in the afternoon.

21. Canning gooseberries and black currants. Shower. Our cheese sold, May, 7c.; June, 7½c., amounting to \$1,707.

22. Green peas for dinner. Sunflowers, first in bloom. Corn growing very fast. Almost too hot to work.

23. First katydid heard. Our grange, ice-cream social (private); we just had a good time. Rainbow from passing shower. Weeding and hoeing. Ragweed is our worst weed here.

24. Tomatoes blooming. Splendid rain in the evening. Last year at this time there were never known so many yellow-jackets.

25. Fog. The potato beetles devouring potato tops, and are three times as ravenous as the slugs, (a surprise to me).

26. The soil here is clay-loam,—yellowish clay sub-soil with blue clay below, about one hundred feet deep to rock-water at bottom.

27. Insured buildings in Caladonia Fire Insurance Company, with contents, for \$1,300. Ice cream lawn-social at T. B.——'s. *Molly*, three years old, five thousand pounds of milk in two hundred and forty and a half days.

28. Hops coming out nicely. Canning green peas from garden. Rained heavily at night, with great wind and lightning.

29. Went to Detroit for the first time. Visited *Ferry's* seed farm; one hundred and eighty acres of onions, beets, and parsnips; and *Robinson's* vineyard, thirteen acres of Concord. He says Concord, Worden's, and Niagaras are best. At Masonic banquet in evening.

30. Visited *Ferry's* seed warehouse and House of Correction. Fine view from City Hall tower. A pleasant trip.

31. Some wheat being drawn in. Oats ripening fast. Harvest considerably later than usual.

To those who know something of the pleasure of "watching things grow" it is easy to see how delightful the keeping of these daily notes must be. More, such reports raise the farm labor, too apt to be considered mere drudgery, into the dignity of a scientific study.

Observations on the growth of a particular flower are frequently of great interest. Such is the following:

Observation on the growth of the morning glory, (*Convolvulus Major*) at Greeley, Weld County, Colorado:

1. Sowed seed at end of porch—seed from D. M. *Ferry & Co.*, Detroit.

2. Put down some stakes for the strings.

3. Began putting up strings for the plants to climb on.

4. Watered the bed.

5. Put up more strings.

6. Watered the bed and pulled out the weeds.

7. Weeded the bed, completed it.

8. One seed noticed which has just sprouted.

9. Sprout appearing above ground.

10. Three plants appear above ground, leaves not separated yet.

11. Two leaves opened.

12. More plants appear above ground.

13. Nine plants are up, and veins on leaves can be distinctly seen.

14. Measured leaf, 11-16 inches wide and 7-16 inches long, and depression at end 3-16 deep, the leaf is obcordate or inversely heart shape.

15. Watered the beds.

16. Eighteen plants up, seven with seed cases still on tips of leaves.

17. The largest leaves are covered with white spots.

18. A middle shoot appears from between the two leaves.

19. The middle shoot takes form of leaves though not fully developed.

20. Measurement of middle shoot 5-16 of an inch long.

21. Veins on leaf from middle shoot visible.

22. Leaf from middle shoot nearly full size.

23. Leaf from middle shoot fully opened.

24. Watered bed and cleaned out weeds.

25. Fourth leaf shoot appears.

26. Fourth leaf partly open.

27. Fourth leaf fully open but not full size.

28. Fifth shoot started.

29. Fifth shoot partly open.

30. Fifth leaf fully open but not full size.

First blossom noticed July 26th, from which time the plants bloom continually.

Very similar reports are made out on animals, birds, or fowls. Here, for instance, is the thrilling history of a family of chickens, told in the briefest notes:

Hen common breed; eggs mixed black Spanish and brown Leghorn (bought them of a neighbor); nest in corner of hen-house, square box filled with fresh chopped prairie hay.

Set thirteen fresh laid eggs, still warm, May 6.

Hen left nest for food May 8, five minutes; May 11, five minutes; May 13, ten minutes; May 16, three minutes; May 20, ten minutes; May 23, ten minutes. First chick hatched, May 26; last one, May 27. Every egg hatched. Weight 1¼ pounds.

The hen left her nest less than any I set this year.

May 6.—Two hens set April 15 on fifteen eggs each. Hatched to-day, eleven chicks respectively.

May 7.—Gave them all to the largest hen and put her in a coop in warm part of yard, and facing south-east. Coop is three and a half feet square, and has sloping roof to shed rain. Covered all but front with old blankets as the weather is cold and stormy.

Chickens of mixed breed. Two have crooked legs, feet turning in, and don't seem strong. Total number twenty-two; weight two and one-fourth pounds; weight of hen four and one-half pounds.

May 11.—One deformed chick died.

May 13.—One chicken crushed by board falling on it. The other deformed chick found dead in coop this morning.

May 19.—One chick stayed out in rain to-day and chilled.

May 20.—Same one sick this morning; goes humped in form of bow.

May 21.—Dead this morning.

June 3.—Weighed chickens, four weeks old, total number alive, eighteen; weight, eight and three-fourths pounds. Weight of hen, four and one-half pounds. Have let them have the run of the orchard each pleasant day for the last two weeks.

June 5.—My attention was attracted this morning by the

cries of the mother hen, and on hurrying out I found one of the chicks in a pail of swill. She stood over it flapping her wings and squawking in the greatest distress, making distracted dashes at the drowning chick in her vain efforts to help it. After I rescued it, she hurried it off in front of her with the most amusing signs of delight and relief.

July 3.—Weighed chicks again. Total number, eighteen, weight twenty five pounds and seven ounces. Weight of hen, four and one-half pounds.

Feed used: Twenty pounds of corn meal, twenty cents; scraps from table, nothing; four quarts of corn, five cents. Total cost, twenty-five cents. Hen now refuses to hover her chicks, but still runs with them.

July 7.—Hen has left her chickens. They now roost in hen-house, and pick their own living mostly, only feed them some table-scraps at night to keep them tame. I always keep a pan of clabbered milk within their reach, they eat it greedily and fatten on it like pigs or calves.

August 3.—Weighed chickens, eighteen in number, twelve weeks old; total weight forty-three pounds.

These chicks have fully proved the value of extra care.

The total cost of their feed was twenty-five cents. The market price for spring chickens here is \$2.75 per dozen.

But the above reports, it is easy to see, are from people of some skill in noting their observations. Does it work equally well with children? A report from a little girl seven years old, one of the youngest members of the club, answers the question. It is a delightfully naïve piece of work, with a tendency, perhaps, to record events more than observations, but showing quick perception which training will soon make invaluable to the little lady. Here it is:

OBSERVATORY WORK NO. 4—JUNE.

1. These flowers are in bloom in our garden; wild honeysuckle, double butter-cup, lily of the valley, lilac, and narcissus.
2. We are eating and selling asparagus from our garden.
3. Yellow iris and yellow lilies are in bloom.
4. Set out geraniums in the garden.
5. It is a cold and rainy day.
6. I went into a friend's house and saw a night blooming cereus, which opened at sunset and closed at dawn.
7. Gathered wild daisies in the meadows.
8. Gathered wild purple iris and honeysuckle.

9. Saw a man getting honey.
10. Brought a bird to life.
11. Pinks in bloom.
12. Yellow lilies in bloom.
13. A friend found her old cat up in the garret with a little kitten.
14. Mignonette and candy-tuft coming up.
15. Gathered laurel in the woods.
16. Heard distant thunder.
17. Papa bought a pony.
18. Had peas from the garden.
19. Roses in bloom.
20. Connecticut river very low, caused by cutting away timber.
21. A boy collecting bird's eggs for scientific purposes, found robin's nest in apple trees and crow's nest in the pines on our place.
22. Our hens laying one egg each per day.
23. Mosquitoes have come.
24. Had strawberries. Chautauqua Rose Day.
25. The boys are catching suckers.
26. Spent a day in the woods.
27. Went in bathing.
28. Saw the milky way and the dipper.
29. Carried flowers to church.
30. Currants ripe.

The above are merely average reports. They are printed exactly as they came from the club members. They do not show at all adequately the variety of observations made. In the charts of temperature, clouds, and wind which accompany very many of the reports, there is work done which shows that any house may be turned into a signal station, and presages a time when private individuals will furnish their own "probabilities."

There are on file at Houghton Farm many reports containing records of phenomena in animal and plant life hitherto entirely unobserved. A promise that as the work extends, substantial benefits are likely to result from it to science, particularly to the science of farming. There are reports which show that into the life of clerks, seamstresses, and all people confined by their business, some knowledge of God's work may come. The Town and County Club is a great, beneficial institution, out of which invaluable results both to its members, and to the world, are sure to come.

OUTLINE AND PROGRAMS.

OUTLINE OF REQUIRED READINGS FOR DECEMBER.

First Week (ending December 8.)

1. "Preparatory Latin Course," from page 194 to page 225.
2. "How to Live." THE CHAUTAUQUAN.
3. "Electricity." THE CHAUTAUQUAN.
4. Sunday Reading for December 6. THE CHAUTAUQUAN.

Second Week (ending December 16.)

1. "Preparatory Latin Course," from page 225 to page 251.
2. "Modern Italy." THE CHAUTAUQUAN.
3. Sunday Reading for December 13. THE CHAUTAUQUAN.

Third Week (ending December 24.)

1. "Preparatory Latin Course," from page 251 to page 278.
2. "How the Old World Became the New."

THE CHAUTAUQUAN.

3. "Italian Biographies." THE CHAUTAUQUAN.
4. Sunday Reading for December 20. THE CHAUTAUQUAN.

Fourth Week (ending December 31.)

1. "Preparatory Latin Course," from page 278 to page 309.
2. "Roman and Italian Art." THE CHAUTAUQUAN.
3. Sunday Reading for December 27. THE CHAUTAUQUAN.

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FIRST WEEK IN DECEMBER.

1. Paper: The Second Triumvirate.
2. Essay: The Life and Works of Cicero.
3. Reading: "The Marble Prophecy." By Holland.
4. An Analysis of Shakspeare's "Antony and Cleopatra," by five members, each taking one act.
5. Paper: History and Description of the Vatican.
6. General Discussion: *Resolved*, That good health lies almost entirely within one's own keeping.
7. Experiments in Electricity.

SECOND WEEK IN DECEMBER.

MILTON DAY—DECEMBER 9.

"His time is forever, and everywhere his place."

1. Roll Call: Quotations from "Paradise Lost."
2. Papers: The Life of Milton, by different members, each one covering a period of ten years.
3. Selections: "On Paradise Lost." By Andrew Marvel. "The Greatest English Poets." By Addison. "Ode to

- Memory." By Mason. (Only the parts referring to Milton.)
4. Essay; Milton's Prose Works.
Music.
5. An Analysis of "Paradise Lost," by different persons, each taking one or two books.
6. Paper: Milton and Dante Compared.—Their lives; their characters; their times; their statesmanship; their literary works.
Music.
7. Table Talk: Milton as a Patriot.

The following books of reference are given: Masson's *Life of Milton*; Dr. Johnson's *Life of Milton*; De Quincey's *Life of Milton*; Hallam's *History of Literature*, Vol. IV.; Lamartine's *Celebrated Characters*; Hazlitt's *Lectures on the English Poets*; Shaw's *English Literature*; Reed's *Lectures on the British Poets*, Vol. 1.; Macaulay's *Essay on Milton*; and Channing's *Essay on Milton*. Others were given in THE CHAUTAUQUAN for December, 1884.

THIRD WEEK IN DECEMBER.

1. A Half-Hour's Talk on Current Events.

2. Paper: Turkey; Its Present Condition and Aspirations.
3. Essay: The Life and Times of Nero.
4. Selections: "The Prisoners of Naples," "The Dream of Pío Nino," "Garibaldi." By Whittier. "Napoleon in Italy," "Garibaldi," "King Victor Emanuel Entering Florence." By Mrs. Browning.
5. Paper: The Catacombs.
6. Essay: Virgil and His Writings.
7. A Study: "The Casa Guidi Windows." By Mrs. Browning.

FOURTH WEEK IN DECEMBER.

1. Roll Call: Quotations Concerning Christmas.
2. Paper: The Decline of the Roman Empire.
3. Character Sketch: Constantine.
4. Book Review: "Rienzi, The Last of the Tribunes." By Bulwer-Lytton.
Music.
5. Selections: "The Legend of St. Mark." By Whittier. "Christmas Gifts." By Mrs. Browning. "The Death of the Old Year." By Tennyson.
6. Reading: "The Christmas Dinner." From "The Sketch Book." By Irving.
7. Questions and Answers. THE CHAUTAUQUAN.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God."—"Let us keep our Heavenly Father in the Midst."—"Never be Discouraged."

C. L. S. C. MEMORIAL DAYS.

1. OPENING DAY—October 1.
2. BRYANT DAY—November 3.
3. SPECIAL SUNDAY—November, second Sunday.
4. MILTON DAY—December 9.
5. COLLEGE DAY—January, last Thursday.
6. SPECIAL SUNDAY—February, second Sunday.
7. FOUNDER'S DAY—February 23.
8. LONGFELLOW DAY—February 27.
9. SHAKSPEARE DAY—April 23.
10. ADDISON DAY—May 1.

11. SPECIAL SUNDAY—May, second Sunday.
12. SPECIAL SUNDAY—July, second Sunday.
13. INAUGURATION DAY—August, first Saturday after first Tuesday; anniversary of C. L. S. C. at Chautauqua.
14. ST. PAUL'S DAY—August, second Saturday after first Tuesday; anniversary of the dedication of St. Paul's Grove at Chautauqua.
15. COMMENCEMENT DAY—August, third Tuesday.
16. GARFIELD DAY—September 19.

In the July issue of THE CHAUTAUQUAN, an article appeared in reference to the Japanese Literary and Scientific Circle. Since that time much interesting news has been received from the thriving young society in which seven hundred and fifty names had been enrolled up to the last of June. Mrs. Drennan, the good genius who has made the organization a success in that land, says: "I wish you might see the deep, growing interest and the good that has already been accomplished. Think of a class in Japan numbering seven hundred and fifty members. It is simply wonderful. Our president tells me that many letters come from different sections where the books have gone, asking: 'Who is this Jesus of whom you spoke in the book?' 'What do you mean by Christian era?' 'What is the Christian church?' etc; thus giving him opportunity to preach Christ to many whom he may never see. These questions he answers by letter and also in the magazine. Many soldiers are now reading the books, and even jinrikisha men are seen sitting, waiting for custom, with their dictionaries and CHAUTAUQUANS in hand studying the course. You would be interested if you could see us at work in our meetings. To save expense we are now using my school-room. All desks, etc., are removed, I have the floor covered with soft mats such as the people have in their houses; then I decorate with flowers, pictures, and books, and light up brilliantly. At the gate hang two large oiled paper lanterns, three feet or more

long, on which, in large Chinese and Japanese characters, is written the name of our society. These lights give a very pretty effect. I have tables for secretary, president, and reporter. All the members come in with shoes off, and take their seats in order upon the floor. At the appointed hour, we open with singing and prayer, then each member takes out his book and, beginning with the first article, he asks any question he may have marked in his reading during the week. These the president is expected to answer. Thus they go over each article. Many questions are asked by different persons on the same article; by the time they are through, each article is well discussed. After this some one appointed gives a lecture or short talk; then singing and prayer to close." It was the intention of the J. L. S. C. to hold a summer meeting, but the terrible flood which devastated that country, Osaka (Mrs. Drennan's head-quarters) and vicinity in particular, made it impossible. Indeed the regular work of the circle was impeded by the lack of funds, resulting from the calamity, for thousands of homes were swept away, fifteen thousand lives were lost, and destitution was brought to many more thousands. Close upon this followed the cholera, and every cent that could be spared during the summer was necessarily expended in relieving the misery of the sick and starving. A letter written in August, however, shows that the circle work is continuing with prosperity. The great difficulty in the Japanese work is to get

money to pay the expenses of translation. The great cost of translating is explained in this way: "The Japanese is a very difficult language. It requires a child in the schools six years to master the characters. Of course to learn the language thoroughly at that rate is just as much as one can do. The result is that those who understand English well, do not understand their own language, very well, or if thoroughly posted in their own language cannot be good Chinese scholars, or, if they have given careful study to Chinese, they are not expected to be familiar with their own or the English languages. There are some exceptions to this rule; and their services are so valuable to the government that it commands all their time at high wages. Hence an article is changed from English to Japanese by one person who understands English. He, however, being defective in his own and particularly in the valuable classical Chinese, his book must be passed into the hands of one who understands that language. He puts it into good Chinese and Japanese, then it must be passed into other hands to see that the thought has not been destroyed by this change of the Chinese scholars; of course each of these persons must be paid for his work." In spite of all this expense, it is believed that the circle will soon be self-supporting. If under all these difficulties, workers in Japan can do such fruitful work, what can we not do in this favored land? There is something both touching and inspiring in these pictures which Mrs. Drennan has drawn for us; the eager learners, the disadvantages attending an attempt to provide the readings, the long distance between Japan and the Central Office, the expense, and the indomitable courage of the leaders. Members of the C. L. S. C. in America ought to work better after this look at the Japanese Literary and Scientific Circle.

A large number of new circles have been organized and reported to the Plainfield office up to this date. Canada heads the list.

At ODESSA and BLOOMFIELD new circles have begun work. —At OTTAWA the circle has grown so large since the last assembly that it has been found necessary to organize a new division. —Away up in north-western Canada, in the village of GLAMIS, in a population of but one hundred and fifty, a circle of twenty-one members has sprung into life.

From BANGOR, MAINE, comes the news: "We have organized a class of about seventy-five members and expect to reach one hundred and fifty." —From PORTLAND: "The C. L. S. C. interest is on the increase in our city. A new circle of about fifty members has just been organized."

A circle of twenty-five members is reported from NOTTINGHAM, NEW HAMPSHIRE. —A call for a meeting of all persons interested in the C. L. S. C. was made through a local paper at CONCORD, and a very successful first meeting resulted.

In the BAY STATE, POTTERSVILLE reports a new circle of eleven members; ROXBURY, one composed of seven young ladies; SPRINGFIELD, two; the Holland Circle which already has a membership of seventy-five members and which from the cordial and general invitation it gives to those interested, to join, will probably soon be larger; and a circle formed in Grace Church, of whose membership we are not informed; RANDOLPH, a circle with the encouraging membership to start with of twenty-nine; and PITTSFIELD, another of twenty members. —A large Chautauqua Literary and Scientific Circle of fifty-three members was organized in Concord a few days since. Rev. J. M. Williams, of the First Methodist Church, is the president. It has laid its plans for good work.

At WOODBRIDGE, CONNECTICUT, the first meeting of a new circle was held in September. —At LAKEVILLE, ten persons have organized a circle; and at ANSONIA twelve persons constitute another.

A jubilant letter from SYRACUSE, NEW YORK, informs us that the Chapin's Institute has been organized with twenty-two

members and with excellent prospect of increase. The plans of the new circle are complete. In their preliminary exercises, in addition to the usual religious services, they read a selection from the writings of the great moralist. The programs are based on those published in THE CHAUTAUQUAN, and lectures and music are supplied by the local talent, of which Syracuse boasts so large a quantity of superior quality. —Wall street, NEW YORK CITY, has a new circle, —no speculation allowed. —A circle with thirty-five members when it was three days old, is thriving prosperously at YONKERS. —At BLACK RIVER is a new circle; at HONEOYE, one with a probable membership of twenty; at SHERIDAN, the Lakeside Circle has been formed, and at NEW BERLIN, through the efforts of a lady who joined the class of '89 at Chautauqua this summer, another of twelve members.

NEW JERSEY reports two new circles, the Carleton, of JERSEY CITY, and the Glendale, of KIRKWOOD. —An exceedingly interesting letter has reached us from PHILLIPSBURG, where there are two circles, the David Braner and the Arbor. Good work has been done by both the circles; the two have united in making special occasions of the Memorial Days, and have extended their work largely by inviting strangers to these performances. One phase of the management is capital: "Gossiping is positively prohibited in our circle, and to talk about the weather, excepting on extraordinary occasions, as in case of a cold wave or a cyclone, and then for scientific information, is punished by the offender writing an essay on the subject. The consequence is that the topic is carefully avoided as no one has a written opinion of the weather, cold, hot, wet, or dry."

The secretary of the class of '89 writes from WASHINGTON, D. C.: "Everything looks favorable for a big boom in the C. L. S. C. work," reporting at the same time the organization of a class of ten members. In the same city a circle of young people has been organized in the Concordia Church, and in the First Congregational church also steps have been taken to form a circle.

ALEXANDRIA, VIRGINIA, has a new circle.

The new counselor of the C. L. S. C., Dr. J. H. Carlisle, LL. D., was at Montague in August, at the assembly and did a deal of work for the C. L. S. C. Inspired by his exertions, a lady from DECATUR, ALABAMA, went home with the determination to build up a circle in her town. She has succeeded and is confident that still larger success is to come to the work in Decatur.

PENNSYLVANIA presents a goodly array of recruits. Among them are a circle of thirty-two members at BEAVER FALLS; one of three members at GUY'S MILLS; the Cresco of eight members at NEW HOPE; one of eleven members in connection with the Eleventh street M. E. church, of PHILADELPHIA; a circle with a membership of twenty-seven at SHICKSHINNY; at WARREN, a circle with a probable membership of twenty; at GLENFIELD, one of seventeen members; at BETHLEHEM, one of five members—this is the second circle organized in Bethlehem; and at KINGSTON one of thirty-three members.

Notice has been received of a circle at STEUBENVILLE, OHIO, with a membership of thirty persons; also of a new circle at NORTH BLOOMFIELD. —MARIETTA has a charming class of ladies, thirty-seven in all, who have begun work together this fall. They represent all grades of C. L. S. C. work. One is of the class of '87, another is reading the seal courses, the majority, however, are '89ers.

MICHIGAN stood in the very front ranks of C. L. S. C. states last year, and it looks as if that position would be held during the present year from the record the new circles have already made. Ten persons form a new circle at HILLSDALE; nineteen have joined the HUBBARDSTOWN Circle; at WHITEHALL, fifteen, with a good prospect of more, have joined a new class; and at BAY CITY, thirty-eight persons have been organized into a circle. This is the first circle ever organized in Bay

City, and it gives promise of a successful campaign. The meetings are held in the parlors of the Young Men's Christian Association building every two weeks.

TERRE HAUTE, INDIANA, starts off with a class of fifteen, with an outlook of exceeding promise.—At INDIANAPOLIS, the Vincent Memorial Circle was organized in September. It is composed of ladies, and meets every two weeks. There are fifteen members, all workers and leaders in society, two of them being prominent singers. A splendid circle is prophesied from the quality of its membership.

ILLINOIS, as usual, does well. At BATAVIA, eighteen persons, of ages ranging from eighteen to sixty-five, are associated in the work, meeting every two weeks for discussion, and select performances. They have adopted a most effective plan to secure a good program. We recommend it to every performer. An expressive, if homely phrase, describes their idea of a performance, "Let it be 'boiled down and sugared off' before being presented."—CHICAGO, also, has two new organizations, of which we have, as yet, received no news except of their existence.—The DIXON Circle was organized in September with ten members and promise of several more. The circle expects to meet once a week, and promises to be an enthusiastic organization.—At MONMOUTH, a class of nine, organized in March, began work as the Shakspeare Circle, in October.—At ROGER'S PARK, ROCK ISLAND, PRINCEVILLE, and OAK PARK, new circles have also been formed.

The MUSCODA Circle, reports itself from WISCONSIN, as small in membership, but with great hopes.—MONTFORT, also, has an organization formed this fall.

The Rollingstone Circle (may its title be a misnomer!) of seven members, has been organized at MINNESOTA CITY, MINNESOTA.—These hopeful words are sent from ST. PAUL, "We expect to double our numbers this year in St. Paul; already one or two new circles are at work, four of the old ones will be reorganized next week, and probably two or three new ones. One of the Grand Army Posts took circulars, blanks, etc., from us several days ago, with the intention of forming a circle in their post. And thus the ball rolls."—Thirty-two names have already been enrolled as forming a circle of the Class of '89 at MINNEAPOLIS.—There has also been a circle of fifteen members organized at WADENA, for the purpose of pursuing the C. L. S. C. readings.

IOWA promises a large increase this year. Ten members have associated themselves at SCRANTON, and look for "more in a few days." At MASON CITY, thirteen members are at work. At GARNER a circle of twenty has been organized. Seven members have sent in their names for a new organization at DAVENPORT, reporting that they have some strict rules, and intend to do good work. At BOONE twelve ladies have undertaken associated study. At KINGSLEY still another circle has begun its first year's work.

More circles are reported from DAKOTA this month than ever before in the history of the work. The new organizations include, a circle of twelve members at KIMBALL, one of sixteen members at FLANDREAU, one of seven, at PLANKINTON, and another of ten, at PARKER. A most gratifying increase over past years. To no people, we believe, is the C. L. S. C. of more benefit than these energetic, hopeful Westerners.

MISSOURI, too, seems to catch the common enthusiasm. Reports come of new organizations at LA PLATA, NORTH SPRINGFIELD, LEBANON, and ALBANY or SILOAM SPRINGS. No doubt but that a great deal of the growth in this vicinity is due to the Assembly held at Siloam Springs, Arkansas, in the past summer. Observation teaches us that the summer assembly never fails to increase the membership of the local circles.

MARSHALL, TEXAS, is the farthest point south to which we go in our rapid survey of the recruits of '89; here a circle has been formed recently, and it promises at an early date to give us the pleasure of a look at its workings.

We prophesied good results from that interesting Crete

Assembly, held last July, and find that they are beginning to come in. A number of the young people of GRAND ISLAND have organized a local circle. A committee of instruction has been appointed, and the members of the circle are to follow the profitable plan of taking turns in leading.—CENTRAL CITY has a new circle which is already well under way in its work. One of the plans of this circle is to have a lecture course this winter, the circle to select the subjects of the lectures from the readings of the coming winter. It is a splendid idea.—The Fairmont Circle has thirty-four members, representatives of nearly all the classes being included in its ranks. A pleasant year's work, they expect.

From THE DALLES, OREGON, a pleasant letter comes: "Last year a few of us met occasionally to talk Chautauqua, but we had no organized society. We have just formed a circle in our little city, and hope to do good work this year. We feel a deep interest in the readings and enjoy them very much."

—ASHLAND and PENDLETON of this state both report new circles.

A new field for Chautauqua work opened last year in WASHINGTON TERRITORY. The assembly at Puget's Sound in August of this year extended the knowledge of the C. L. S. C., and now the efforts are beginning to tell. LA CONNER and CHEHALIS are the first to establish new circles.

The circles of other years are sending in their greeting, suggestions, and plans earlier than usual this fall. We begin in CANADA with our notes, at HAMILTON, where during the past four years, a large circle has been in operation. The members have found it impossible to give their time regularly to the study of all the subjects prescribed, and so have selected from the course. The printed syllabus of their fourth session, extending from October, 1884 to June, 1885, gives an excellent idea of the amount of work accomplished. The meetings were held monthly, and the programs consisted of essays and readings, each restricted to twenty minutes in length, speeches each ten minutes long, and lectures of not more than forty-five minutes. The nine meetings held included work on Greece, American Literature, The Poor, Psychology, the Reformation, and Chemistry.

OLDTOWN, MAINE, sends a word of promise in regard to its growing circle: "I think you were informed last year that our circle had adopted for a motto, *nulla vestigia retrorsum*: apropos of this spirit we start out this fall with a membership of about fifty, and hope to report more later. Our committee of instruction will be larger and more thoroughly organized than last year."—Another Pine Tree Circle, at SACCA-RAPPA, is equally hopeful in its look at the coming year's work. "We are a little band of thirteen members. Our meetings steadily increased in interest last year, and we are anticipating much pleasure and profit from our winter's reading. The new program certainly promises to be a very enjoyable one."

The largest circle of LYNN, MASSACHUSETTS, the Raymond, opened its year most auspiciously. A largely attended meeting was held at which seven new members were received, and plans for the year's work were made. A talk on Chautauqua was given, music and literary exercises followed, and the inevitable supper finished the evening. The Lynn Chautauquans are confident of a large increase in the Chautauqua work in their vicinity this year.—NEWBURYPORT is one of the fortunate places, rich in circles, of which the latest to report is the Belleville of twenty members. All classes are represented in the circle, and the meetings are made pleasant and profitable by the essays, readings, and music. There are four organizations of Chautauqua readers in Newburyport: the Belleville, Merrimac, Gay, and Rivermouth.—At MARSHFIELD the Webster Circle has resumed its monthly meetings, with an addition of ten members, and an enthusiasm that promises well for the future.—A circle not reported until now did good work all last year at ROWLEY. There was no formal or

ganization of the membership, but the interest was sufficient to prevent the loss of a single meeting during the year. Most of the Memorial Days were also observed.—A remarkably healthy Chautauqua spirit exists at WORCESTER. A recent history of the local circles of that community appeared in a local paper, from which we cull the following items: The oldest circle in the city is the Bryant, organized two years ago with twenty members; last year the membership increased to forty. The Hawthorne Circle was organized in 1883, and now numbers about twenty. Nearly all the members of this circle have read several of the seal courses. Last year the Longfellow, Warren, and Scott Circles were organized; the first with a membership of thirteen, the second of fifteen, and the third, a neighborhood gathering, having a fluctuating membership. Last summer about thirty-three members of the Worcester circles attended the two-weeks' session at Framingham Assembly—a sure guarantee that great things will be in Worcester this year; the first of which, undoubtedly, has already come off—a union picnic of the members of the five circles, held on September 9.—The SPENCER circle of thirteen members has held its annual meeting and is ready for work.—The Granite Circle, of ROCKPORT, reports itself with five new members, and with abundant courage to begin the year's work.—With the printed program of the exercises laid out for the Longfellow Circle of NORTH CAMBRIDGE for the month of October, comes a line telling its outlook for '85-'86: "The interest of the members does not seem to have diminished, and all are ready and eager for the year's work."

The Newfield Circle, of WEST STRATFORD, CONNECTICUT, has re-organized for its third year of reading. There is every prospect of a delightful winter. The circle will be increased by eight or ten new members.—At DANBURY the circle has also re-organized, and with expectation of enjoying the coming year more than the past.—From WEST WINSTED a member writes: "Again we are started here. We have a bright, active, new leader, and expect to enlarge our membership. More gentlemen have put in an appearance, and add much to the interest of the circle."—The Philomathean, of GREENVILLE, a circle of '88, has held its preliminary meeting and is at regular duty once more.

At PASCOAG, RHODE ISLAND, last year there was a circle conducted with excellent success. It has resumed work this fall, twenty-four members having been enrolled.

Rev. S. V. Leech, D.D., chaplain of the New York State Senate, and pastor of the Saratoga Springs M. E. church, has been elected to the presidency of the highly cultivated circle at SARATOGA, NEW YORK. Last year Dr. Leech was president of the Grace Circle of ALBANY. We feel certain that the Saratoga circle will be sure of a prosperous year under his able leadership. On the opening night Dr. Leech closed his address, after giving a glowing picture of the travels on which the circle would go this coming year, with these words: "Let us take with us the jewels of relentless perseverance, broad Christian charity, and a vestal ambition to honorably bring back much intellectual treasure. And above all, let us take Him for our companion, whom the Roman emperor's representative nailed to a cross,—the risen Christ, who made the hearts of His travelling companions burn within them as He talked with them on their way to Emmaus. His cross, long ago exalted as a symbol of victory over Rome's old temples, and seen, as story tells us, by the last Roman emperor outlined in stars on the dome of the night, has become the emblem of a world-wide faith. As we begin to-night our journey to Rome, let us listen to Him who whispers ever to His own 'Lo, I am with you always.'"—At MILLPORT the circle has begun another year's work.—The circle of GLENS FALLS starts off ambitiously this year. Determined to enlarge its work, it has asked of the Plainfield Office "as many circulars as you can spare, one thousand if possible. We shall throw them broad-cast, and hope for an abundant harvest." D-dec

The C. L. S. C. work for the winter has commenced with unusual vigor at CHAUTAUQUA. At the weekly meetings the course of study as published in THE CHAUTAUQUAN is thoroughly examined. The president assigns different books to different persons for examination, and for some two hours the most lively times are enjoyed.—One of the papers of ROCHESTER gives a glowing account of the work done in that city this fall for the C. L. S. C. "Early in September a large audience assembled to discuss the theme of the Chautauqua course of reading. The interest and enthusiasm manifested far exceeded the most sanguine expectations of the friends of this movement. During the evening the nature and general outline of the working of this great home college were presented by Rev. Dr. Cushing, T. G. Young, and others, and after an informal conversation participated in by several individuals in the audience, about thirty persons filled up the blank forms of application furnished those who desire membership in the general organization of the C. L. S. C., and almost the entire audience expressed a warm sympathy with the movement. A week later, another meeting was held in the rooms of the Academy of Science, and there, as in the former meeting, a very lively interest was shown by all present, and a large number of applications for membership were handed in. The interest in this direction is spreading in a most remarkable manner throughout the city. It is not in any sense sectional or denominational, embracing as it does members of all denominations, and many not formally united with any religious organization. It is one of the chief characteristics of this system of home culture that it aims to afford assistance and impart a stimulus towards obtaining information that will be beneficial to those whose time is limited, and by suggesting a plan for utilizing spare moments, secure benefits which would otherwise be lost."—We notice in the reports of many of the circles that there is a goodly percentage of "local members." We are glad that they come in to take even half-work; but why not take full work? On this point hear one of the counselors, Dr. W. C. Wilkinson: "It has come to my knowledge that there are large numbers of readers on the prescribed course of reading of the C. L. S. C. who have not formally attached themselves to the membership of the C. L. S. C. We are glad of this, but we should be more glad by half if they would subscribe themselves members of our body. I desire to impress on every member of the C. L. S. C. that he shall do all that is possible to induce all such known outsiders to become formally members of the Circle, for this reason, that it will add a great element of strength to us. There is nothing that succeeds like success, and we all know that a snowball will grow when it is large, and we need to be as large as it is possible to be. Therefore let me urge earnestly upon every loyal member of the C. L. S. C. to use every influence of honorable blandishment to induce these outsiders to come into the fold and be a part of our living strength."

In the *Ocean Grove Record*, a most faithful friend to Chautauqua's interests, we find the following: "The Ocean Grove local circle of the C. L. S. C. was organized September, 1884, after certain addresses relating to the Chautauqua Idea, had been delivered in the Tabernacle by Dr. Hurlbut, of Plainfield, N. J. At the instance of Dr. Stokes, as we suppose, Dr. Hurlbut was with us again on Thursday evening of last week, and delivered an interesting lecture in the hall of the Association building, which greatly stimulated the members of the circle, and won the favor of many outsiders to its comprehensive and excellent aims. Before the close of the evening's exercises the members of the circle surrounded their president, Dr. Stokes, and presented some valued testimonials in poetic guise, with floral tokens of their regard, on the occasion of his birthday. Among the new members who joined the circle was Dr. John Wilson, late president of the W. F. College, Wilmington, and now a resident of the Carrollton, Ocean Grove."—The Alpha Circle, of EAST ORANGE, NEW JERSEY, at its first

meeting in October had a very interesting discussion on "The Best Methods of Conducting a Local Circle." Many new suggestions were made and the future meetings promise to be unusually entertaining and instructive. The circle is prosperous, numbering over thirty enthusiastic members. It invites correspondence with other circles.—At BRIDGEPORT the fall reunion found the circle with one member of the past year gone, and one new member present to fill the vacancy. They undertake the year's work with good promise.—CAPE MAY COUNTY has four circles in active operation; one of the liveliest of these is the Vesta, of GOSHEN, which has been running delightfully for a year. The C. L. S. C. spark first touched Goshen in '79, and has steadily grown until it is a very respectably sized flame.

The reports from PENNSYLVANIA are as cheery as ever. The PHILADELPHIA circle heads the list and deserves a good place among the active circles. It closed its work in July last by a full review of the readings. Though the members report themselves as all being "bread-winners," they delight in closing their week with a discussion of their studies. This fall found thirty persons ready to re-organize under the Philadelphia's banner.—The WEST BELLEVUE circle held its first meeting of the year in October, for the purpose of electing officers and discussing the best methods of conducting the circle. Eight new members were received and the roll now contains twenty-eight names.—Sixty-one names have been enrolled in the circle at NEW BRIGHTON this fall—a strong organization that promises to do a great deal of genuine work.—That irrepressible Allegheny circle of '88's at ALLEGHENY CITY, sent out in October a stirring call to duty. Some points from it may be useful to others:

Allegheny, October, 1885.

DEAR FRIEND: We are about to begin another year of our C. L. S. C. reading. We trust that you have finished your reading, and made out your memoranda for last year, and are now ready to begin with us, another year of earnest endeavor to do all the required work of this year. Should you have become discouraged, and feel like giving up, "stop, and think." Think of the pleasure you have had. Think of the pleasure yet in store. Think of the finished course. Think of the knowledge gained. Think of those who are discouraged, and to whom the required reading will be of untold value, and who by your example may be led to finish the required reading of the year. And, lastly, think of the discipline of mind and body; of being able to say at the end, I was tempted to give up the reading; but, by my patience, by my perseverance, by my will power, I have done the required reading, and can claim the reward—the diploma.

The Allegheny circle will hold its first meeting on Tuesday evening, October 6, 1885. You are invited to meet with us, and bring your friends with you, that we may again organize our circle, and be ready to encourage and assist each other in our readings; and also, that we may enjoy the pleasure and profit that always come from the meeting of kindred minds and hearts. Come, and welcome.

COMMITTEE OF INSTRUCTION.

The program also contained the exercises planned for the evening's entertainment.—For several years the circle in connection with the Y. M. C. A. of ERIE, has been in a prosperous condition. The organization for the coming year has been completed satisfactorily, twenty new names having been added this season. At the opening meeting a social was combined with the presentation of the Chautauqua Idea, and ice-cream and cake were served as a finish to the enjoyment. A name has recently been given to the circle; in honor of Counselor Edward Everett Hale, it calls itself the Hale. The secretary's expressive opinion of this circle is: "The work here is growing; it must grow with the enthusiasm which some of our members possess."

The Quintette Home Club, of WILMINGTON, DELAWARE, has been successful in its work of the past year. It took up the readings as an experiment, but found them so well adapted to its needs that it will continue the course during '85-'86.

WHEELING, WEST VIRGINIA, has a circle, of whose re-organization we should be glad to hear. In July the circle was still continuing its meetings, following as closely as possible the weekly programs given in THE CHAUTAUQUAN, and expecting to meet throughout the summer.

FLORIDA has made rapid advance in C. L. S. C. work since the meeting of the De Funiak Springs Assembly in February last. One of its largest and best organized circles, that at PENSACOLA, recently held its first meeting for the year. Business took possession of the evening. One motion of merit was carried: that all members who should be absent for four consecutive meetings, without a good and sufficient excuse, would be dropped from the roll. The membership is growing so that it has been found necessary to limit it to seventy-five.

The crop of Buckeyes is as large as ever. At PERRYSBURGH the circle is hard at work. One of the members brought home a full year's inspiration from Chautauqua this summer, and has succeeded in imbuing her associates with this noble quality.—At Cincinnati, also, Chautauqua was made to assist at the opening session of the year in a report which gave a fresh impulse to those who were not quite through with their readings. The secretary writes: "We begin 'square', the first of October this year."—St. John's Circle of TOLEDO was re-organized early in October, with a membership of sixteen. An addition was made to the list of officers, by the election of a corresponding secretary. The idea is that the circle may communicate with other circles for their views and plans.—At COLLAMER, also, the circle has re-organized.

At DAVISON, MICHIGAN, a re-organization was completed in October and new officers elected. This is the fourth year of work for the majority of the Davison circle. New members are being constantly taken in and there is an ambition to keep up the circle for years to come.—It is a pleasure to introduce, even at this late date, the two-year old circle of SOUTH HAVEN. Its fortnightly meetings have been giving them pleasure and profit until they declare, "We cannot do without it."—From KALAMAZOO a friend writes: "The Alpha Circle met and re-organized in September. We expect a membership of about fifteen active, interested workers, and hope to enjoy a very pleasant winter."

A circle of pleasant history is at work in BLOOMINGTON, INDIANA. A year ago twenty-two ladies took up the readings. Though a little late in starting, they made up the back work, and chose a name and a motto. The name, Kirkwood Circle, is in honor of Dr. Daniel Kirkwood, of the Indiana University; the motto is "*Ad astra*." A great deal of work was accomplished, the Memorial Days were observed, and the social life was strong. As they re-organize, still twenty-two in number, they send good cheer and good wishes to all the circles of the brotherhood.—The McKinsey, of PLYMOUTH, began work in September. A larger number than ever before is equipped for the full course, while the attendance of local members is much increased. One very encouraging feature of the McKinsey is that the members who have finished the four years' course do not fall out of line, but continue as most faithful and interested helpers. The plan outlined in THE CHAUTAUQUAN is followed, though the programs are of their own devising; the circle is conducted informally.

The Oakland Circle, of CHICAGO, ILLINOIS, has always been prosperous. It closed the season of '84-'85 with a brilliant reception of which the *Inter Ocean* gave an extended report. About one hundred invited guests were present. Social intercourse, literary exercises, and refreshments filled the evening delightfully.—The founder of the circle at FARMER CITY, a lady of noble character and ability, has recently died.—The Beta Circle, of QUINCY, made no formal report last year, but announces that its past success has induced it to continue during the coming year.—The Norris Circle, HAMPSHIRE, has ten workers who are again at their studies. One of the number sends an earnest testimony: "I confess I am wholly

carried away with this course of study. I have averaged fully two hours a day at my reading, since I joined the class three years ago. Chautauqua is now a part of me. My studies are my recreations."—EVANSTON, too, has a good outlook for the coming months. The secretary in her report says: "Our circle has had a very auspicious opening. Two parlors of a large church were crowded with our old members, faithful and enthusiastic, and seventeen new ones joined, with a prospect of more to follow. We have over sixty members now. An afternoon circle has been started here, and another of twenty-five persons in SOUTH EVANSTON. At ROGER'S PARK, a suburb, about thirty-five members have been enrolled.—The Shakspeare Circle, of ARCOLA, desires to gratefully acknowledge the benefits it is deriving from following the work in the prescribed course of studies. For many years the members gave one afternoon each week to reading the plays of the great English dramatist, but three years ago decided to take the C. L. S. C. reading instead. Nine hesitatingly began the work, fearing that they could not find the time required and that the obligation might become a task. The price of the books was a consideration, also; but they made the beginning and united in trios in buying the sets of books. The Saturday afternoon meetings have been a source of much pleasure, and the work a constant profit and delight. Nearly every one has a complete set of the books, and when the four years have expired they look eagerly forward to taking the seals. One of the number says: "Eight of us have been very regular in attending the meetings and observing the Memorial Days. We find the latter of great advantage in becoming acquainted with the lives and works of the authors. One impromptu feature of our last Shakspeare Day was having his characters named and the company naming the play in which they figure. It was a good exercise. We have faithfully worked on, all summer through each vacation, reviewing the work of each preceeding year, and think we gain as much during those three months as in the other nine, because we strengthen our weak places. We are a band of housekeepers, and it takes close managing to keep up all other duties and this besides, but we are well repaid for the exertion made. Five babies have distributed themselves in our circle since we began the work, but nobody turned back. We took the precious burdens in our arms and journeyed on. There is another circle in our little city, and one in the neighboring city of TUSCOLA. We were invited to meet with the Tuscola circle recently, where we heard very interesting things charmingly told about Chautauqua from those who have just returned from there. It was a very happy meeting and convinced us that the social pleasures connected with the C. L. S. C. are a small part of the good it is doing."—We have received our first notice of the circle formed in connection with the New England Congregational church of CHICAGO. This organization has over seventy members.

The BERLIN, WISCONSIN, graduates of the class of '83, being unable to be present at the commencement exercises at Chautauqua, on August 18, of that year, assembled at the house of one of the members, and with a chart of the grounds in hand, and a copy of the *Assembly Herald* which contained a program of exercises for the day, followed the route of the procession from Hedding avenue to the Hall in the Grove, listened in imagination to the addresses, and received their diplomas from the hand of their honored leader. It was to them a sacred hour, made doubly so by the thought that their feeling was shared by hundreds of their class-mates whose hearts, like theirs, were that day at Chautauqua. A bountiful repast was prepared, which was followed by a social hour. The occasion was one of such great enjoyment that the members resolved that

"The yearly course which brings this day about
Shall never see it, but a holiday."

An Alumni Association was organized, officers elected, a

committee appointed to prepare a literary program for the next meeting, which was held on August 18, 1884, and far excelled the first. Dr. Vincent was requested to write a letter for the meeting in August, 1885, and give a passing thought to the little band of friends who yearly consecrate one day to the Chautauqua Idea. This he kindly consented to do. On August 18, the third annual reunion was celebrated, every member being present, and the following program was carried out:

SHAKSPEREAN SYMPOSIUM.

"But thy eternal summer shall not fade."

PROGRAM:

ROLL CALL, ANSWERED BY QUOTATIONS.

"Is all our company here."

"Answer as I call you."—*Midsummer Night's Dream*.

"They have been at a great feast of languages and stolen the scraps."

—*Love's Labor Lost*.

SECRETARY'S ANNUAL REPORT.

"And the hand of Time shall draw this brief unto as large a volume."

—*King John*.

"I am Sir Oracle, and when I ope my mouth let no dog bark."—*Merchant of Venice*.

PRESIDENT'S ADDRESS TO THE CLUB.

"Bid me discourse: I will enchant thine ear."—*Venus and Adonis*.

"Something that's brief."—*Othello*.

LETTER FROM DR. J. H. VINCENT.

"Spirits are not finely touched

But to fine issues."—*Measure for Measure*.

TRANSACTION OF BUSINESS.

"If all the years were playing holidays,

To sport would be as tedious as to work."—*King Henry IV*.

DRAMATIC ENTERTAINMENT.

"All the world's a stage,

And all the men and women merely players."

—*As You Like It*.

"Therefore they thought it good you hear a play, and frame your minds to mirth and merriment."—*Taming of the Shrew*.

AS YOU LIKE IT.—SYNOPSIS.

CONVERSATION.

LUNCH.

"Here's a noble feast."—*Timon of Athens*.

"Now good digestion wait on appetite,

And health on both."—*Macbeth*.

"My hunger's gone."—*Cymbeline*.

A SOCIAL HOUR.

"So hallowed and so gracious is the time."—*Macbeth*.

* * *

"To leave this keen encounter of our wits."—*Richard III*.

"So good night unto you all."—*Midsummer Night's Dream*.

SPARTA has a circle beginning its third year. It has been composed of seven members, one of whom, Mrs. H. S. Howell, died in the past summer. At the time of re-organization this fall, the number was increased to eleven. During the past two years a very informal method of conducting the circle has been employed, their being no officers, the leader being the lady at whose house the circle met. This year, however, officers have been elected. The Memorial Days are wisely made special occasions by the Spartans.

In spite of the fact that the circle at SHENANDOAH, IOWA, lost several of its members last year, it has started this fall with twenty members.—A change in the second of the Memorial Days has been made at MANCHESTER, Oliver Wendell Holmes being chosen to take the place of Bryant. On November 4, the circle observed the day with songs, essays,

and extracts from the "autocrat's" writings. This circle has recently lost one of its honored members, Mrs. Amelia Beardslee. —The TABOR circle met and re-organized for the year in September. There are eleven members now in the circle.

But one of last year's DAKOTA circles has, so far, reported re-organization, that at WOONSOCKET. There are a few enterprising old Chautauquans at Woonsocket, who know how to run a first-class circle, so that the present report is sure to be followed up by many more this year.

A meeting was called early in September at PARSONS, KANSAS, by graduates of the C. L. S. C., to organize a class for '85-'86. It is most encouraging to the leaders in this movement to know that the alumni, in so many cases work faithfully for its interests. The circle of alumni at Parsons, who are taking this active interest in helping on the new class, met regularly once a week for four years, and only three of the original number, twenty, were unable to graduate. We believe that this percentage of graduates is unusually large. Certainly the circle ought to be very proud of its success.

We learn that there is a circle at LITTLE ROCK, ARKANSAS, though we know nothing of its history. We shall hope to hear more of it this year.

The Chautauqua interest in TEXAS has been thriving wonderfully during the past year. The San Marcos Assembly, held in August, gave a fresh impetus which we feel sure will be evident in increased membership. The work there can not fail to be of a high order, as so many people of culture and refinement are giving it support. A very kindly compliment was paid to Chautauqua at the New Orleans Exposition by Mrs. Clark, of BONHAM, Texas, on Shakspeare's Memorial Day, by a poem on Shakspeare, written in honor of the day. We give our readers the pleasure of a quotation from it:

"Three centuries ago, on mother England's breast,
A babe was nursed of more than royal birth,
Beneath the shadow of an humble roof;
In narrow household ways, a mind was trained
Whose influence widens with the lapse of years.

O! soul, so sweet
And so unselfish as to leave of self
The merest trace, while to its flowing springs
Of purest sympathy the world still turns.
Man in his glory, woman in her grace,
The great, the grave, the beautiful, the pure,
The wise, the fool, all, all find welcome there,
And all are mirrored in the crystal depths
Of one man's mind, as in the magic lens
Of Truth's own palace. Then our poet sang
His wondrous music to such golden words
That they are braided in our household speech,
And handed down from honored sire to son,

As precious jewels and of priceless worth.
The mother sings them to her sleeping babe;
The poet weaves them in his daintiest rhyme;
The lover breathes them to his listening mate;
While olden world and new are knit more close
By common heritage in Shakspeare's fame.
So many pulses of our being thrill
Beneath this master hand, we must needs share
With honored England in our poet's love.
A new-born world, with new-born hopes and aims
And lofty aspirations, a new, grand race
From goodly root, transplanted to new soil,
Has risen since his day. Yet who may know
How far his vision reached into the mists
Which then enwrapped the west?
He who in fancy could bid faries put
A girdle round the earth in minute's time,
Must have had prescience of the wonders wrought
In this most wondrous age, where steam still works
Its miracles—still spans new wildernesses—
And makes wide deserts bloom with happy homes."

The Chautauqua Literary and Scientific Circle of LINCOLN, NEBRASKA, class of '88, held their first meeting for the year on the evening of October 2, in the rooms of the state superintendent of public instruction in the state house. The officers of the circle for the coming year were elected at the last meeting in June, so that the circle was ready to begin work at the first meeting. An admirable plan!—A program was announced through the columns of the daily paper, (a paper which, by the way, gives a world of help to the C. L. S. C. in Nebraska) and a circle of fifty members assembled at the first meeting. *Bon voyage.*

A circle of six '88's and four '89's are at work at OURAY, COLORADO.

The Chautauqua Literary and Scientific Circle of SALT LAKE CITY, UTAH, was re-organized September 21. The secretary writes: "Our meeting was a glad reunion of loyal Chautauquans. Some of our number had spent the vacation recruiting in the cañons, others had just returned from visiting homes in the far off East, all were glad to resume their Chautauqua work, and were more enthusiastic than ever before in their determination to get all that can be obtained from the Chautauqua course. Rev. T. C. Iliff, who has been the president of the circle since its organization in '82, was re-elected. Under his wise and able instruction the circle has grown in numbers and in influence. Nine of our number are Progressives, and have all the dignity of senior Chautauquans. 'Once a Chautauquan, always a Chautauquan,' is our watch-word, most, if not all of our number, feel that we have a life membership in this great and grand movement."

THE C. L. S. C. CLASSES.

CLASS OF 1886.—"THE PROGRESSIVES."

"We study for light, to bless with light."

CLASS ORGANIZATION.

President—The Rev. B. P. Snow, Biddeford, Maine.

Vice Presidents—The Rev. J. T. Whitley, Salisbury, Maryland; Mr. L. F. Houghton, Peoria, Illinois; Mr. Walter Y. Morgan, Cleveland, Ohio; Mrs. Delia Browne, Louisville, Kentucky; Miss Florence Finch, Palestine, Texas.

Secretary—The Rev. W. L. Austin, New Albany, Ind.

Treasurer—W. T. Dunn, Pittsburgh, Pa.

The Class of '86 has a well established reputation for being good readers. This ought always to mean good reviewers as well, and we believe members of '86 do practice the great art of

reviewing faithfully what they read thoroughly. It is the reviewing that clinches and secures the reading. We do not question that the example of '86 in this point, will give light to their associates of the other classes. Review by thoughts and word and pen.

Of the several circles in the city of Auburn, Me., one is composed almost wholly of Progressives, and there is a generous sprinkling of them in other circles. Would not an occasional Senior Class meeting there and elsewhere, when feasible, be a good thing, during the year, to consider matters of special interest to '86 as they are passing the last year of the course, and to make plans for the graduation season at Chautauqua or Frammingham or Fryeburg or any one of the other C. L. S. C. centers?

Of course, Chautauqua itself will be the Mecca towards which all will turn next August. The Progressives are sure to be there in thousands.

The most cheering words come in from those who, alone, are studying for light. Their courage and perseverance are alike commendable. There must be real scholarship, genuine student mind, where one holds steadily on through four years of unassociated work.

The following lines are by one of our earnest '86 readers in New England. This accomplished author lost her hearing in childhood.

TWELVE YEARS OF SILENCE.

Father, who in love unerring
Hath my life in silence veiled,
Hushed be every faithless murmur,
For that love has never failed;
Twelve long years a spell unbroken
Has o'er ear and voice been thrown,
Yet the Savior's voice hath spoken
To my heart with clearer tone.
Eight bright years their course had numbered,
All undimmed by care or pain;
Though those sounds so long have slumbered,
Yet their echoes still remain.
In my fancy still I hear them,
And a gleam of light they throw
O'er a path whose lonely sorrow
Only "silent ones" can know.
As the bird at midnight singeth
In his purest, clearest strain,
Music sweet our Father bringeth
From the discipline of pain;
On my heart His peace bestowing,
Better far than earthly bliss,
Soul and mind and heart are growing
As they might not but for this.
What of life to me remaineth,
Lord, I consecrate to Thee;
Silent still but working ever,
Like the light my life shall be,
Till the shadow from it lifted,
Sound once more shall God bestow,
In that world whose ceaseless music
Pause and discord ne'er shall know.

—Alice C. Jennings.

The Class of '86 has lost one of its most earnest and loving workers. Jeannette Cope died at her home in Leetonia, Ohio, September 25, 1885. Her cheerful disposition and love for her work, brightened the lives of all who knew her.

The welcome announcement has reached us that Rev. Phillips Brooks, D. D., has accepted the invitation to be the orator of the Class of '86 on Recognition Day at Framingham in August next.

CLASS OF 1887.—"THE PANSIES."

"Neglect not the gift that is in thee."

OFFICERS.

President—The Rev. Frank Russell, Mansfield, Ohio.
Western Secretary—K. A. Burnell, Esq., 150 Madison Street, Chicago, Ill.
Eastern Secretary—J. A. Steven, M. D., 164 High Street, Hartford, Conn.
Treasurer—Either Secretary, from whom badges may be obtained.
Executive Committee—The officers of the class.

A few '87's lingering through the glorious September after-

math at Chautauqua, plucked every day a bouquet of pansies from the plot and carried them to a sick member on the grounds. Such beautiful offices throw a glory over all the work.

A member, "faint yet pursuing," writing from New Bedford, Mass., calls herself "only a dwarfed Pansy," sends a contribution to the "Pansy Plat," and does not enumerate among her blessings the privilege of a residence in an enviable city, the first in the United States to open a free library.

If every member of the Class who receives the circular asking it, will promptly forward the slight contribution for the purpose, the balance due on the Pansy Plat will be speedily liquidated.

The Allegheny Circle started off with a brilliant and beautiful program for October 6. To look at it kindles a desire to be present at the meeting, and if this be the beginning of the year what will the showing be in May next?

Friends sending items to either of the secretaries for this column should bear in mind that they will fail of use if received for the following month later than the tenth of any current month, and that most matter received too late, though excellent, becomes perishable for a second month.

It is quite certain that beside the three valuable prizes already tendered for the competitive examination next summer, there will be several others, though arrangements for them at this time are not positive.

President Russell, on his return from the American Board Meeting in Boston, stopped in Hartford on the evening of October 16, and gave the circle there an excellent lecture on "Reading and Reading." The Hartford Circle is largely composed of Pansies who gave their president a warm greeting. His lecture was entertaining and instructive and was listened to with close attention by a large audience.

The meetings of the Pansy Class at Framingham this year were very enjoyable. It had permanent headquarters where all members were welcome and where they held an informal welcome meeting, class prayer-meetings, and a reunion. At one of the meetings, a paper was read by the Rev. N. B. Fisk on the topic, "How much should religion be introduced into local circles?" Nineteen of the twenty-six circles represented had some kind of religious exercise during the evening; either opening prayer, scripture reading, or singing "Chautauqua Songs."

The '87's of the Worcester Circle are reported as all keeping on with their reading.

DeKalb Circle, of Brooklyn, N. Y., reports twenty-five members, of whom fifteen are Pansies. None have dropped out, but one has gone to college.

The Pansies had the largest representation at Framingham this year, and the enthusiasm was proportionally large. The blue badges seem to be everywhere.

TO NEW ENGLAND '87'S.—You are cordially invited and earnestly requested to be present at our third re-union, to be held at 1:15 p. m., Saturday, December 19, in the vestry of the People's Church, corner of Berkeley street and Columbus avenue, Boston, Mass. The regular meeting will open at half past two o'clock; the program includes music, a class poem, and a short address by Rev. J. L. Withrow, of Boston. Those who are in the habit of coming to Boston for holiday shopping should plan their visit for a date that will include this re-union.

(Signed)

SARIE M. COREY, Sec'y of N. E. '87.

CLASS OF 1888.—"THE PLYMOUTH ROCK."

"Let us be seen by our deeds."

CLASS ORGANIZATION.

President—The Rev. A. E. Dunning, Boston, Mass.*Vice Presidents*—Prof. W. N. Ellis, Brooklyn, N. Y.; the Rev. Wm. G. Roberts, Bellevue, Ohio.*Secretary*—Miss M. E. Taylor, Cleveland, Ohio.*Treasurer*—Mrs. W. Chenault, Fort Scott, Kansas.

As votes are still being received on Class name, the result will not be known until next month. Many in sending their vote have not specified as requested. It is not sufficient to write, "Our circle votes in favor of The Plymouth Rock or The Pilgrims." Such a vote cannot be counted. You must specify the number of votes as follows: "Our circle casts ten votes for The Plymouth Rock, and ten votes for The Pilgrims." When you are a member of a circle, your vote must come through the circle, unless it be impossible to have it so recorded; in which case, forward directly to Rev. C. C. McLean, giving name and post-office address *plainly* written. Let every member of the Class, and every circle having any items of interest forward the same to Rev. McLean, from month to month.

Many ask why their items do not appear the next month after they are sent. Please remember that all copy for the '88 column in the present issue of THE CHAUTAUQUAN was obliged to be in the hands of the editor by October 25, that it was in type by November 1, and that copy for January must be in Meadville by November 25. To make this possible, copy must reach Mr. McLean at St. Augustine, no later than the 20th of the month preceding the issue.

The local circle at De Funiak Springs is making fine progress and adding to its membership.

Sherbourne Street circle, Toronto, Canada, all members of the Class of '88, closed the past year successfully, and has organized for the present year. Out of twenty-two members all but one completed the required reading of the last year. Twenty-two persons have joined the circle for '85 and '86; the number will be increased to thirty at least.

Lynnfield Centre, Mass.:—"For two hundred and sixty-five years, the name, Plymouth Rock, has stood as a symbol to the world, of freedom, purity, progress, and hope. No better name could be chosen, as representative of the broad and deep foundation which Chautauqua aims to give to every son and daughter of '88, than the historic and suggestive name of Plymouth Rock."

The following clipping will be of interest after the note published in the '88 column of THE CHAUTAUQUAN, for November: "I have received a letter from Chancellor Vincent, wishing to know if we would give that corner stone to the new building, now to be erected, rather than to Memorial Hall, which has no immediate prospect of being rebuilt. I shall write him that we shall give the stone for the *new* building as he desires. I shall see that it is suitably worked with the year of the class, etc."

HARRY L. BRICKETT, Committee.

Chicago, Ill.: "Last year I belonged to no circle, but enjoyed the long evenings reading alone; this year's reading has begun with a companion, an old Chautauqua graduate; she is sick in the hospital. I go to her every evening; she is a good listener, and hopes to receive a seal for the year's reading. It is for her a bright spot to look forward to, during all the long day. We have some names pledged for Chancellor Vincent's book. I think it will be no trouble for the '88's to pay for their bell."

CLASS OF 1889.

CLASS ORGANIZATION.

President—Prof. J. H. Phillips, Birmingham, Ala.*Vice President*—Rev. M. H. Ewers, Martinville, Ill.*Treasurer*—R. H. Bosworth, Newburg, N. Y.*Secretary*—Geo. J. Presbrey, Washington, D. C.*Assistant Secretary*—Miss Nellie Haywood, Pana, Ill.

All members of '89 are requested to take an interest in the Class bell. Let the names and the money be sent at once to the Class treasurer, Mr. R. H. Bosworth, Newburg, N. Y. Dr. Vincent's book, "The Chautauqua Movement," will be forwarded as soon as published.

The Holly Circle, lately organized at De Funiak Springs, Florida, has twenty regular members and a larger number of local members. Much interest is manifested in the work, and it is expected that more will take up the course during the year.

The secretary of the Florida Chautauqua receives many letters of inquiry about the C. L. S. C. Large and enthusiastic circles are being formed in various parts of the state, and all through the south the Chautauqua Idea is rapidly spreading.

The Class of '89 should select a name before the next assembly. It was decided at Chautauqua to let the absent members have a voice in the selection. We suggest this plan as the most feasible. Let each circle select a name and send it to Miss Eva D. Mattoon, De Funiak Springs, Florida. The two names receiving the greatest support will be published in THE CHAUTAUQUAN. All '89 Class circles will then vote upon the two names and send the result to Miss Mattoon. The name which thus receives the majority of votes will be the name by which '89 will thereafter be known.

The Class of '89 made a prosperous beginning at Framingham Assembly in August, enrolling about one hundred names before the close of the session. It was decided to form a New England branch of the Class. At one of the meetings it was suggested that as the year of graduation would be the centennial celebration of the inauguration of General Washington, the Class could appropriately be called the Washington Class.

POST-GRADUATE CLASSES.

LEAGUE OF THE ROUND-TABLE.

President—Mr. L. C. Peake, Drawer 2559, Toronto, Canada.*Vice President*—Mrs. E. F. Curtis, Geneseo, N. Y.*Secretary*—Miss Bessie C. Hicks, Cincinnati, Ohio.

At a meeting of this organization held at Chautauqua in August of the present year, the following resolution was adopted:

"That each member of the League be requested to prepare an article on 'Chautauqua' during the year, to be sent to the president; also, to furnish the local press with an occasional article on the same subject." Some may treat of the place, others of the work in general, still others may touch upon special departments,—the C. L. S. C., the Normal department, etc. Members may choose their own specific theme, only, let every one write, and do it soon. Send articles to me, and I will examine and forward to Chancellor Vincent.

LEWIS C. PEAKE, President L. R. T.

The New England Class of '85 has elected Edward Everett Hale, and Dr. L. T. Townsend, honorary members.

The following are the officers for the Class of '85 in New England:

President—Luman T. Jeffs, of Hudson, Me.*Vice Presidents*—Joseph C. Haskell, of Auburn, Me.; Lena A. Chubbuck, of New Bedford, Mass; William B. Heath, of Arnold's Mills, R. I.*Treasurer and Secretary*—Clemie A. Young, of Waltham, Mass.

QUESTIONS AND ANSWERS.

"PREPARATORY LATIN COURSE IN ENGLISH."

CICERO'S ORATIONS.

1. Q. By what do we estimate the oratory of speakers who lived in the past centuries? A. By the style and rhetorical excellence of the productions.

2. Q. Did Cicero, and such as he, study the art of oratory? A. They did. They had gifts but assiduously cultivated them.

3. Q. Did Cicero speak extempore, or after thorough preparation? A. His most brilliant paragraphs were carefully elaborated in private.

4. Q. What objection may be urged against the introduction of these orations in the "Preparatory Course?" A. The elaborate oratory belonging to an age so remote, and an order of things so different from ours, requires maturity and thorough preparation before it can be fairly understood and appreciated.

5. Q. From what oration is the first selection made? A. That for Marcus Marcellus, who had fought against Cæsar in the civil war, but whose offense was, at the earnest solicitation of the senate, forgiven.

6. Q. What are the chief characteristics of this oration? A. The style is florid and Asiatic; the speech throughout eulogistic of the man forgiven — more so of the clemency that forgave him.

7. Q. Would such a highly wrought panegyric of Cæsar, under the circumstances, seem at all extravagant or insincere? A. Probably not. Public sentiment was, just then, strongly in favor of Cæsar.

8. Q. May not this eulogium have looked to the future quite as much as to the present or the past? A. Yes. But he might wisely commend virtues of which there was some promise, and by praising, encourage them.

9. Q. What inspired this eloquent, laudatory address? A. Patriotism. It was hoped by patriots that the clemency which forgave the offender, would have some respect to the rights of loyal citizens.

10. Q. In what cases did the silver-tongued orator become terribly severe? A. In the prosecution of criminals such as Verres and Catiline.

11. Q. In the orations against the former, what evidence is there of previous exact preparation? A. Of the six orations printed, only one was delivered. The others were published just as they would have been spoken if the defendant had remained and the trial proceeded.

12. Q. In historical order, which preceded, the oration for Marcellus, or those against Catiline? A. The latter, which were delivered before Cæsar went to Gaul.

13. Q. Who was Catiline? A. A Roman senator, bankrupt in fortune and character.

14. Q. What traitorous acts were plotted by him? A. To burn Rome, assassinate the senators, and put to death all who were opposed to him personally and politically.

15. Q. How did the consul, Cicero, ascertain the details of the plot? A. By adroit management on his part, the whole was revealed by a mistress of one of the conspirators.

16. Q. Having certain knowledge of the danger, and evidence to convict the guilty, where was the indictment made? A. At a special session of the senate in the temple of Jupiter.

17. Q. Why was not the chief conspirator arrested, tried, and punished? A. It was not yet known how many accomplices he had, and the case would be less complicated if the leader was cast out.

18. Q. Was there method in Cicero's unexpected outburst? A. The speech was thoroughly systematic.

19. Q. What effect on the traitor had the announcement that proof of his guilt was ready? A. He showed self-control, and attempted some vindication, but finally rushed from the senate-chamber, threatening vengeance to his accusers.

20. Q. Was his threat to return and avenge himself ever accomplished? A. An army was sent against the insurgents, and Catiline was soon after killed in battle.

21. Q. The first oration proving so effective, what occasion was there for the subsequent orations? A. Catiline's friends in the city made bitter complaint of the violence of the consul, who had now to justify himself before the Roman people.

22. Q. Does he apologize for what he had done without special warrant in Roman law? A. He boldly asserts the merit of his official conduct, while he at once accuses, and excuses himself for not being more severe against the guilty.

23. Q. Which is thought the finest passage in this speech? A. That following his enumeration of the infamous classes consorting with the traitor, in which he admirably contrasts the cause of the country with that of its foes.

24. Q. What is a chief excellence of the third oration? A. It details, in a masterly narrative, how the government obtained conclusive documentary evidence against the conspirators.

25. Q. From whom was that evidence obtained? A. From ambassadors of the Allobroges, then in the city, who had been approached too confidently by the leaders of the infamous plot. The consul suggesting it, they obtained a full statement of the plans, and the names of the principal conspirators.

26. Q. Did they deliver the documents while in the city? A. They were allowed to depart, and were arrested on their homeward journey with the papers in their possession.

27. Q. What is discussed in the fourth oration? A. It was delivered in the senate, and has reference not directly to Catiline, but to the punishment to be inflicted on his associates still in prison.

28. Q. What punishments were proposed? A. Some senators urged the death penalty; others imprisonment for life under circumstances of special severity.

29. Q. Whose influence was strongly in favor of milder measures? A. Julius Cæsar's. He made a specious plea for imprisonment.

30. Q. Who closed the discussion? A. Cicero, whose manliness, self-control, and courage were never seen to better advantage than in his well-guarded, respectful, but thorough refutation of Cæsar's argument.

31. Q. What was the decision of the senate? A. The extreme penalty was promptly decreed, and the condemned conspirators were that night executed in prison.

32. Q. What are known as Cicero's philippics? A. His fourteen orations against Mark Antony, similar in style to the famous harangues of Demosthenes against Philip of Macedonia.

33. Q. When were they delivered? A. When the orator was old, and new dangers menaced Rome.

34. Q. How do these last pleadings of Cicero compare with his former efforts? A. They have less polish, but more power.

35. Q. Is there evidence that Cicero was aware at the time of the delivery of these orations of his own impending calamity? A. There is a sadness about his orations prophetic of the end that was near.

36. Q. What was Antony's character and the crime charged

in the indictment? A. His character was profligate. Having reached the chief place of power in the state, he sought to perpetuate his imperial authority.

37. Q. What was Cicero's solemnly expressed wish and prayer for himself and country? A. Not that he might live, but that dying he might leave Rome free.

38. Q. What resulted from his last manly efforts? A. Some opposition to the usurpers was excited, but it was not successful. The hopes of patriots were disappointed, and Cicero was soon after beheaded.

39. Q. How do we estimate Cicero? A. In strength and originality he was not unusual. But in versatility of genius, acquired knowledge, and universality of accomplishments, he had no superior.

40. Q. To what period does Virgil belong? A. To the Augustan or Golden Age of Roman literature—(70—19 B. C.).

41. Q. What were his characteristics as a poetic writer? A. He chose Greek models, and followed them, but not servilely. He borrowed much, and what he openly appropriated from his favorite authors, was used as only a poet of rare genius could use it.

42. Q. Were the more elevated metrical productions of the Greek and Latin poets composed in rhymes? A. They sought harmony and accentual rhythm, but generally avoided rhymes.

43. Q. Why have English translators, with few exceptions, adopted rhymes? A. Either from personal preference, or because the English ear demands it as almost essential in versification.

44. Q. Of Virgil's pastorals how many are now extant? A. Ten; they vary in length, but average about eighty lines each. So far as such poetry has a Greek origin, Theocritus was his model in writing it.

45. Q. Was the poet familiar with the rural scenes of which he gives such charming descriptions? A. He had read of the Greek Arcadia, and knew something of pastoral life in Italy, but the scenery and circumstances were mostly imaginative.

46. Q. Are these artificial pastorals of any special interest to us? A. Only as samples of the literature of that classic age.

47. Q. Which of Virgil's pastorals is most remarkable? A. The fourth, addressed to Pollio, in which he celebrates the birth of a marvelous child, destined to reign over a peaceful world released from its thralldom.

48. Q. What is most noteworthy in this poem? A. The manner of allusion to the child, and the blessedness foretold are singularly coincident with the prophecies concerning Jesus, the Christ.

49. Q. In what literary dress is Pollio here presented? A. In a prose translation.

50. Q. What famous oratorio was constructed after this model? A. Pope's Messiah.

51. Q. What is the subject discussed in the Georgics? A. It is a poem on farming, and was probably intended to encourage agricultural pursuits.

52. Q. Is there any present value in its lessons? A. The theory and practice of farming have so changed, that thrifty husbandmen are not likely to profit much by the poet's suggestions.

53. Q. About what particular branches of the industry does he advise his readers? A. The raising of cereals, fruit culture, the breeding and treatment of farm animals, and the management of bees.

54. Q. What translation of the Georgics is used in this "Preparatory Course"? A. Dryden's—written in iambic pentameters, varied by triplets of lines instead of couplets, with Alexandrines introduced at irregular intervals.

55. Q. What is remarkable about the beginning of the poem? A. The brevity of the argument outlined, is in striking con-

trast with the length of the invocation, and the compliments paid to Augustus.

56. Q. How do the literary excellence and finish of this, compare with Virgil's other productions? A. They are of a much higher order.

57. Q. What honor did our great statesman, Webster, put on this poem? A. It was familiar to him, and so admired that in a letter to a farmer, he quotes verse after verse, only changing a few words to suit the circumstances of his correspondent.

58. Q. How is the *Æneid* introduced to us? A. As a great national epic, modeled after the poems of Homer.

59. Q. What translation is adopted, and why? A. That of the late Prof. Conington; on account of the learned preparation, accuracy, and fidelity.

60. Q. What fact is admitted as a hindrance to the complete success of this translation? A. The author chose for his verse a measure in which the stately movement of the original is lost.

61. Q. Is Conington's translation commended as highly poetical? A. It is, rather, rhetoric in rhyme. But it is good rhyme and good rhetoric; and in that he represents the author.

62. Q. What hinders a more literal translation? A. In Latin, different case, number, and tense endings allow great liberty in the construction of sentences, while in English the agreement and government of words must be indicated by their collocation.

63. Q. Wherein does the *Æneid* differ from the *Iliad*? A. It was more of a national poem than the *Iliad*; the founding of Rome was a grander theme than the wrath of Achilles.

64. Q. What are some of the chief features of the first book? A. The promptness with which the story is begun; the naturalness, or well concealed art, in telling it; and the great wealth of compact, sententious lines.

65. Q. In what verses have we touches of real sublimity? A. In the storm at sea, and the shipwreck.

66. Q. To whom was the story of the Trojans' wanderings and perils, given by *Æneas*? A. To the Carthaginian queen, Dido, who had received the shipwrecked strangers.

67. Q. How did *Æneas* preface his response to the request for the story of their misfortune? A. With an ingenious allusion to the pain it would revive, so neatly condensed in Latin, that no translation can adequately render it.

68. Q. In the love affair which followed, did "pious *Æneas*" act honorably? A. Piety, as understood by the poet and practiced by his hero, included duty to parents and country, but allowed falsehood and dishonor in other relations.

69. Q. With what does the story begin? A. With the capture of Troy by the crafty Greeks.

70. Q. What accessories to the capture of the city are mentioned? A. The wiles of Sinon, and the fate of the priest Laocoön, who had warned them against the stratagem of the Greeks, are introduced.

71. Q. In describing the night following the capture of Troy what incidents are mentioned? A. The death of the aged Priam, and the flight of *Æneas*, with the reluctant father Anchises on his shoulders, and little Iulus by his side.

72. Q. What details are given in the third book? A. The departure from Carthage, the voyage, arrival at different ports, the story of the blind Cyclops,—besides many incidents skillfully interwoven.

73. Q. What was Queen Dido's sad fate? A. She burned herself on a funeral pyre.

74. Q. Were the games described in the fifth book merely for sports, or to discipline the contestants? A. The theory of the Trojans was that manly sports developed manly qualities, gave confidence, and assured success.

75. Q. What interesting events are found in the sixth book? A. *Æneas*' descent to Hades.

EDITOR'S OUTLOOK.

FOUR CHAMPIONS OF TEMPERANCE.

The temperance reform in America is now one hundred years old. That during this period the cause has had a healthy growth and in the main has been prosperous, every close student of moral reform will admit. A great variety of organizations has sprung up in connection with the movement and many of them have died; all sorts of methods have been tried to advance the cause, many of which are now obsolete; but, in spite of all mistakes, failures, and retreats, the net gains are large. These gains are mainly the recognition of the reasonableness of temperance habits and customs by the people, and the possibility of raising a standard of total abstinence and prohibition, of inscribing these words on the temperance banner under which the greater part of the temperance army marches. Public opinion is a spoiled child on moral questions. When wrong it is not easily corrected; but if once set right, it is hard to turn it into a wrong way. There is a healthy public sentiment in the country now as a fruit of a hundred years' growth, and it is not likely to decay, or to be spoiled. As to the creed which this hundred years has brought us, it may be interesting to inquire.

We are disposed in these days to look for the practical creed of a church in the teachings of its living preachers, just as we look for the doctrines of political parties in the speeches of their great leaders. We may judge the temperance reform by the sentiments of its great leaders. We point to four persons in this conflict as leaders of the several divisions of the temperance forces.

John B. Gough and Francis Murphy are apostles of temperance-truth to the drunkard. They are both reformed men. They know the sufferings of the man whose appetite for drink overcomes him. Mr. Gough is known everywhere as a champion of total abstinence, an advocate of moral suasion, a pleader with erring men. His influence has been tremendous. Mr. Murphy has adopted the gospel temperance plan—and there is none better. He uses the pledge and blue ribbon, employs ministers of all the churches with laymen, calls upon reformed men to speak; in fact, he conducts temperance campaigns. By this method he has moved men by the ten thousand to sign the pledge. These men, Gough and Murphy, have plead in this country and in Europe with marked success, and have demonstrated that their methods are wise and skillfully used.

Neal Dow is the apostle of prohibition. He was one of the original advocates of this method, and still continues its supporter. A man of deep convictions, of great force of character, and an able organizer, he succeeded in accomplishing in his own state of Maine a work which has caused temperance people everywhere to turn to the east to study the effects of prohibition.

The fourth and youngest of these leaders, and in many particulars the most successful of them all, is Miss Frances E. Willard. Standing at the head of an organization which numbers two hundred thousand women, she has in her hands the task of a general. The Woman's Christian Temperance Union is a unique organization; free from any kind of political bondage, either of ambition within, or preferment without, made up of women from the home, it speaks and acts in behalf of the men who are under the curse of rum, and for the protection of the children who are obliged to grow up in the midst of beer bottles, saloons, and breweries. Reforms must be effected through great organizations, just as Christianity is being diffused by her organizations, and the women who stand at the head of the W. C. T. U. Miss Willard, Mrs. Foster,

Mrs. Hunt, and their associates, must be regarded in the light of deliverers. We have nothing to say here of Miss Willard's private views of woman's suffrage, or concerning the Temperance Political Party; these two questions do not come into the case as we now make it up. We simply present the four leaders of the temperance armies of the United States. We believe them to represent the temperance principles and methods which must win in the second century of this great reform,—John B. Gough, Francis Murphy, Neal Dow, and Frances E. Willard.

HOLIDAY BOOK-MAKING.

It has become the custom of publishers to make their heaviest issues of books during the holidays. This custom is largely the result of the great growth of the habit of making holiday presents, a general result of which is that everything suitable for presents is manufactured expressly for the holiday trade. This trade in "presents" grows larger every year and shows no sign of falling off. It grew right on through the hard years, seventy-four to eighty; and last year, in spite of the complaints of dealers, we believe it was larger than the previous and more prosperous year. This is partly due to the fact that new persons are every year drawn within the influence of the custom which is constantly extending itself among the people. Let everybody give a Christmas present to everybody is coming to be the motto of the season. We consider the custom now simply as a fact; it has its disadvantages as well as its merits, but we pass both sides of the question over to traders and moralists. Since we have, and will continue to have a gift season, it is inevitable that gift-books will form a staple article of this friendly and social commerce. Books are always good things to give to our friends. All things considered, they are probably the best things. They are outside of the conventional list of necessities, and the gift of a book will not offend any susceptibilities of the poor or make the receiver appear to be an object of charity; and if gifts have their origin in some simple form of good will, they ought to be such as do not humiliate or oblige the recipient of them. A barrel of flour may be given in charity, but unless the man who receives it sustains special relations to him who gives, the gift implies that the receiver of it is an object of charity. All books, however costly, are free from this embarrassment as gifts. They can be dispensed with; life can go on without them. Many presents of articles of clothing do not come under this rule, and there is some danger of a perversion of the word "gift" to improper uses and to the setting up of a fictitious custom in place of a real and useful one. A father, for example, complained that his daughter had made him a shabby present for Christmas. "Why, father," replied the unconscious victim of perversion, "you could have had anything you were willing to pay for!" Now, of course, that is not a gift at all; and girls ought to be so educated as instinctively to know that some effort and sacrifice of their own should enter into their gifts to members of the household. But if the gifts are articles of clothing, there is likely to creep in some element of "barter" or some odor of humiliation—of barter among equals, of humiliation when the giver has most from which to give. It is hinted that in some families, the gifts are methodically arranged. "You give me this and I will give you that." This is the barter side of the matter; there is another. We refer to a father's providing his family with necessary clothing under the disguise of Christmas gifts.

Books, we repeat, are the most appropriate gifts for the holidays; this is the general feeling, and the holiday trade in

books has grown to vast dimensions. Books so employed are real "presents" which may just exactly express the heart of the giver; therefore there is an enormous demand growing up for such books as may meet this want. For many years, it has been held as gift logic that a holiday book must have a great deal of its value on the outside and need not have much inside; and that the best inside is fine paper and pictures. In short, the gift-book was regarded as of necessity an ornamental one. This notion has so far given way that solid books command now a large holiday sale. Sets of famous authors in boxes, with a variety of bindings, are now issued for the Christmas trade; and in such cases, however fine the outside may be, the inside excels the covers; and if the outside be plain, the text within is just as valuable as it is in the costly bindings. There is room, however, for advancement in this reform. It might well become the rule that the trashy book could not find a holiday market—that books for the Christmas season must have solid merits; and as a corollary that at this season the most valuable books of the whole year make their appearance, and that writers as well as paper-makers and pressmen do their best work for the holidays. "I am writing a holiday book," is now an equivocal statement. A few years ago it would have meant "I am doing some poor work for a market which will not buy good work." It is not certain that a better signification can yet be given to the remark. The printer and binder are still too much trusted to secure a large sale. The reform has begun, however, and it will go forward. The best books will seek the holiday trade when ever a sufficient public welcomes them. The buyers determine at last the quality of any kind of goods. If the customer demands good wares, they will get into the market and drive out the inferior grades. Demand that a book shall not be merely a "triumph of book-making and a marvel of binding," but also a triumph and marvel of thought, style, and moral worth. Yes, of all seasons, the Christmas season is the appropriate time for selling and buying and giving and receiving the best books.

AMERICAN HUMOR.

Among the useful lives which have ended during the last month, a high rank is by general consent given to that of Henry W. Shaw, who was known round the world as Josh Billings. He combined remarkably well most of the good qualities of all humorists; we miss in him no strong trait except the refinement of Washington Irving. He had the common-sense of Franklin, the mirth provoking seriousness in blunders of Artemus Ward, and the labored hyperbole of Mark Twain. He added to these qualities a broader and more complete rendering of the national wit as it is found outside of literature; and he had the merit of laughing for a good and praiseworthy purpose. He satirizes social faults with bad spelling, and ridicules vice in quaint and homely epigrams which will long be quoted. He is a philosopher of the people who retranslates the oldest maxims and arrests attention to a truism by the setting of it—as for example when he says: "When a man begins to go down hill, everything is greased for the occasion." He said of himself that he wrote his sayings first in good English and then put them into bad spelling and grammar; the ragged clothing attracted popular attention and gave his thought hospitality in the common heart. His wit lay in the body and not in its dress. His proverbs can be reduced to plain and good English without any real loss of force. He has, himself, furnished some common renderings; but the illuminated texts are generally preferred.

The Rev. H. R. Haweis, who is now lecturing in this country, published, about four years ago, a little book on American Humorists, in which he makes no mention of Josh Billings. Our *Æsop* had not yet attracted much literary attention. Indeed, the English have had to domesticate our wits before they could understand them. They would never have known Artemus Ward or Lowell or Mark Twain or Bret

Harte, if reprints and personal visits had not naturalized these wits in England. Mr. Shaw was less fortunate than the rest for the special reason that he confined his work to epigrams; a form of literature which travels slowly; and he gave his epigrams a dress which was effective at home and precisely the reverse abroad. Besides, in the others the wit was rare and of varying excellence; the best sayings had a good setting of less brilliant metal. When Mark Twain gives a long sketch of an examination of his overcoat by a Syrian camel, a single witty remark occurs on a page. He represents the camel as deeply interested in the coat, "as if he had an idea of getting one made like it." The climax of the sketch, when the camel dies of trying to swallow the author's manuscript, is labored and flat to the general sense. Mr. Shaw was always witty and produced only a small bulk of humorously expressed wisdom.

The most important fact about American humor is that so little of it has as yet been gathered up by the professional humorists. There is a constant play of this mental electricity in American life, and if we were to change our temper and produce it no longer, the old newspapers would contain more valuable matter for the research of a future historian than all the public archives of the nation—for the recorded wit of the time is in the "funny" columns of the daily press. Most of it is, however, not recorded at all. This is partly because much of it has a coarse, and some of it an obscene, setting.

American wit is irreverence, but it is a remarkable fact that this can not be said of Mr. Shaw's epigrams. He did much to cure us of this malady. Yet it is doubtful if political wit can safely be freed from the leveling criticism of irreverent wit. We cannot afford to shut our eyes to the drunkenness of judges, the egotism of reformers, the selfishness of governors, and the weakness of presidents. Our reverence must find its aliment in divine things, home life, and feminine modesty. They will always fail who try to cultivate reverence for the office-holding person. Half of us are always waiting for a chance to put this person out, and we are bound to know his weak points. On the other hand, religion, home, and woman present a vast field out of which much irreverent humor ought to be removed to more appropriate tracts of life.

The prominent trait of American humor has always been exaggeration. The essential element in wit is surprise. When one listens to a humorous story he is intently watching for the surprise in the point of the story. This surprise is most complete when exaggeration intensifies it; as when the *Norristown Herald* says: "Locomotives are very cheap this season, but we would not advise our readers to lay in their winter stock of them at present quotations; they may go lower." Puns are a more common ground and they range widely. One editor was described as writing his editorials on his back. Another suggested: "That it must be inconvenient for the type-setters; we prefer to write ours on paper." Let us now ask ourselves whether American humorists are really useful persons. We shall unhesitatingly reply, yes, with all their faults, they contribute to our instruction, to social progress, to that branch of entertainment which is restful and refreshing. If we could not find recreation in the play of the fancy and the contrasts of wit, if our seriousness had no flavoring of humor, we could not work with such breadth of power. Play is as necessary as sleep. But on the other hand, the vices of our wit, the unwholesome quality to be found in much of it—especially in the coarse stories which go round in masculine society—need vigorous rebuke and the wit who shall render them ridiculous will do us the highest service. There are men who become incapable of appreciating any humor which is not filthy, and their delight is altogether in the filth. It is a degradation of the intellect and a debasement of the moral nature. Most men, and too many women, have taken "some soil" from the coarse, irreverent, and vicious jest or vulgar story. It is not necessary that we should play in brutal fashions or joke irre-

erently or accompany a satirical story with the reek of the moral sewer. The social humorist who performs for small masculine audiences, dreadfully needs a thorough purgation; and some such could not be cleansed by an Atlantic Ocean. Henry W. Shaw set us an example of clean, wholesome, and reforming humor. Taking up Franklin's line of epigram, he has broadened the field and filled it with the philosophy of plain life, and made it delightful by a quaint and sweet humor, which were wanting in Franklin. If he is sometimes coarse it is to match the fibre of American life, but his coarseness never becomes vulgarity, and he is as reverent as Jonathan Edwards.

THE BUSINESS DEPRESSION.

The business troubles of the last two years are certainly not ended, but the country has accommodated itself to them, and, by a kind of paradox, is becoming relatively prosperous. The depression had a very unusual number of contributory causes. Previous periods of trouble had simpler origins, and were more easily reformed. In 1837, 1857, and 1873, our disasters came from speculation. The present crisis began with collapses of speculative business; but these crumbling enterprises were rather incidental calamities than causes of general distress. We have had a great falling off in demand for iron goods, especially railroad wares; and this arrest of demand came mainly from the fact that we had built more than enough railroads to serve our needs. The shutting off of this outlet for iron products, affected all other trades, and the general result came in a surplus of labor. Multitudes of unemployed men clamored for work while their families cried for bread. Manufacturers of all classes of goods, were rendered cautious by an untimely agitation of tariff questions. A presidential election followed with a change of the political control of the nation, and a prospect that the general financial policy of a party which had governed the country for a quarter of a century might be seriously altered by the new masters. The silver question, the national bank question, the greenback question, the tariff question,—in fact, every financial question—is subject to the caprices and chances of the legislation of a new administration and congress. The party now in power has always condemned the financial and commercial policy of the party to which it succeeds. Business men have not been able to forget, whatever their political preferences may be, that a vast body of financial legislation is liable to serious change. There may be no change; but if politics have any

logic there should be; and shrewd men will act cautiously.

Nearly everywhere, however, mills long idle have begun to revolve, and a large part of the unemployed are obtaining employment at reduced wages. The reductions have cost much angry discussion; it has been a summer of strikes and lock-outs. There is a doubt, too, whether there is any natural and normal demand for all the work which all our mills can do. There is certainly a natural limit to the consumption of iron goods. And, meanwhile, it is wholly uncertain what portion of this demand will be satisfied, after July next, by foreign mills. There is a perplexing element in the forecast of each manufacturer. The manufacturers are to be praised for the courage with which they carry on their mills; but it is highly probable that they will keep close to the wall, going little beyond the orders received for goods. The great industries set the fashion for all business; it is a cautious and hesitating method. Perhaps it is more wholesome than the dashing, break-neck speed of the prosperous days just behind us. A careful study would probably show that our people are, in the aggregate, accumulating capital; and yet all the evils of the crisis and all its dangers exist in nearly the same degree as last year; there is a vast railroad complication in which untold millions of capital are reduced to unprofitableness; there is a general discontent of labor; there is apprehension of political tinkering with tariff and currency; there is a lack of foreign demand for our surplus harvests; there is a general slowing down of enterprise. All these evils are disciplinary; they are rough checks on the exuberance of the speculative imagination. They are the brakes on an unsafe engine. We Americans can bear adversity better than prosperity. We need the check-rein in business. We have always grown rich in periods of depression, and squandered the gains of dull days in seasons of extraordinary prosperity. It is a paradox, but it is the truth. From 1873 to 1880 the complaint of hard times was a continuous, monotonous wail. The books will show that in these years we laid up wealth more rapidly than in any other seven years of our history. This peculiar reversal of the natural order ought not to encourage any one to experiment with the conditions surrounding our industries and exchanges. We are doing a safe business with good money and on reasonable assurance that goods made to-day can be sold to-morrow. It would be possible to shake this assurance. We hope that no rash statesman will be encouraged to test the question whether or not we can be ruined by Act of Congress.

EDITOR'S NOTE-BOOK.

Correspondents will excuse Chancellor Vincent if he does not promptly or in person answer their letters. His work, at all times heavy, at this period of the year is utterly overwhelming. Although several clerks are busy with his correspondence, letters will accumulate. It must also be remembered that to his usual work Chancellor Vincent has added, for the benefit of Chautauqua, a heavy task in the "new book." Be patient if your letters are not answered at once.

The outlook for the Class of '89 of the Chautauqua Literary and Scientific Circle is at this writing most encouraging. The enrollment of the class surpasses that of any previous class at this date in its organization, and from all indications the growth is far from complete. The books at Plainfield will be kept open, and new names enrolled far into the winter. The classes of '86, '87, and '88 are all holding their own, very few names dropping out as compared with the whole number.

On Saturday, October 31, Ferdinand Ward was sentenced to ten years in states prison at hard labor, for the crime of ob-

taining under false pretences \$71,800, and a certification of a check on May 5, 1884. The summary justice in this case meets with hearty public approval. Such transactions as those of which Ward has been guilty would, in a year's time, unsettle the whole business system of America. The harm already done is incalculable, as Judge Barrett expressed it in his sentence to Ward: "You have done more than any man ever did for undermining commercial honor and affecting injuriously financial confidence." This swift, decided action of the law and the uniform public sentiment against the deed are the surest antidotes to the poison Ward has put into the veins of the country's business.

John McCloskey, the first American cardinal, died in New York City on October 10, and was buried in the crypt of the Roman Catholic cathedral of the same city, on October 15. It is over fifty-one years since Cardinal McCloskey was ordained to the priesthood. During that time he has won, not only honor in his own church, but the kindly regard of the whole world. He was a man of peace, gentle and forbearing

even to his enemies. The expressions of regard in his memory, come from all classes of people, and are thoroughly genuine.

The war rumors in the East still continue contradictory and threatening. For a month the Porte has been energetically trying to collect a respectable army. Servia and Greece are in belligerent attitude, claiming that they must be quieted with accessions of territory, if Rumelia and Bulgaria are united. Repeated invasions of Bulgaria by the Servians have been reported, many of them false. All this shows the affair to be in a very delicate condition, which probably nothing but the fear of the Powers keeps from open irruption. If the states can be kept from war for another month, there is no doubt but that a peaceful adjustment of territory will be made.

The Mormons are posing as martyrs for conscience sake. Four of their number, convicted by the new laws in October, refused to obey the law in future, and were sentenced to six months' imprisonment and three hundred dollars fine. The organ of the Mormon church says: "We join with all saints in invoking blessings upon the noble men and women who have exhibited their integrity to God and the cause, and their devotion to principle, by submitting to bonds and imprisonment rather than deny the faith or break the covenants." All of which sounds well, but does not do away with the fact that the "faith" is in immorality, and that the "covenants" are with vice.

Institutions which exist only in a circular, are becoming dangerously common. An example came out this last month. An ambitious circular advertised a "Bureau of Literature," which claimed to dispose of the worthy MSS. of talented authors who had up to this time failed of recognition. It displayed a cut of an extensive block, and advertised a capital of fifty thousand dollars. Upon investigation the block was reduced to a single room occupied by a stenographer. Signs of neither incorporators nor associates nor the fifty thousand dollars could be discovered. Beware of circulars.

A still further disaster threatens the letters of literary men. Literary thieves who appreciate full well the value of manuscript letters of famous writers, have been operating for some time in England and America, attempting to sell stolen letters of Ralph Waldo Emerson, which the philosopher wrote to Carlyle. If to the horror of having one's letters edited injudiciously and afterward garbled by a curious and unsympathetic public, the danger of thieves making a speculation out of them is also added, literary men will save their heirs trouble, if, like Whittier, they consign their correspondence to the flames.

A general interest in forestry is being aroused in Florida. A Forestry Congress will be held at DeFuniak Springs, December 16 and 17, of this year. During this session the Chautauqua Circles of Florida and adjoining states will inaugurate the Arbor Day movement in the South. Each circle will be provided with an arbor upon which it will plant such vines as it may select, and each circle will plant and dedicate such trees as it may provide. The governor of the state has promised his aid in this congress and it is believed that Arbor Day will be established as a legal holiday through this effort.

The American elements have no respect for even so venerable a thing as the Egyptian obelisk. They are veritably eating it up. To prevent this irreverent destruction, workmen have been sent to Central Park to encase the monolith in a coating which, it is believed, will prevent further depredation. Every loose flake of the stone is being removed. After this the surface of the stone will be heated in sections and the protec-

tor, a compound of paraffine and creosote, will be applied. This compound penetrates the pores of the stone, and hardens. It resists the action of acids, alkalies, gases, and all extremes of temperature, and produces no other effect on the appearance of the stone than to make it slightly darker. If the success expected is attained, there will be a big field open in America for this new process of preserving stone.

The late Richard Grant White had a choice story, illustrating the native courtesy of well-bred Americans, which is in print this fall for the first time, we believe. When General Washington was in New England, he was entertained at dinner by a country gentleman, who lived comfortably but quietly in his old-fashioned home far from town. When the General rose to go, the little daughter of the host, not yet in her teens, opened the door for him. As he passed out in his stately way, he bowed and said to the little maid: "I wish you a better office, my dear." "Yes, sir," she quickly replied, with a bow, "to let you in sir."

In our last issue we printed "De massa ob de Sheepfol'," and confessed our ignorance of its authorship. Rev. John Dewitt Miller, rector of the Emmanuel Reformed Episcopal Church, of Philadelphia, writes us: "The poem was written by Sally Pratt McLean, of Simsbury, Connecticut, author of 'Cape Cod Folks.' Charles A. Dana, of the New York *Sun*, shares your flattering opinion of the poem."

A railroad along the shores of Chautauqua Lake is now a fixture. The track has been laid out on the east side of the lake from Jamestown to Mayville, touching at Griffith's, Bemus Point, Long Point, and Mayville. It is said that Massachusetts parties are the principal capitalists. They have employed about fifteen hundred men to grade, ballast, and track the road. Flat boats have been purchased, upon which houses have been built for the transportation and boarding of the laborers. It is manifest that this railroad is not being built for the purpose of accommodating the thousands of people who visit the Chautauqua meetings, or it would be located on the west shore of the lake, and touch the Chautauqua grounds, but indirectly it will be an advantage to Chautauqua because in the summer season the travel on every line of steamers and railroads about the lake, converges at Chautauqua. Jamestown greatly needs this new line of travel, but it is common talk that this is a link of a road in a new line via Lake Chautauqua, Lake Erie, and so on through to the West.

The most interesting celebration of October was that of the two hundredth anniversary of the revocation of the Edict of Nantes, on the 22nd, by the descendants of the Huguenots. A notable event in connection with this anniversary has been the appearance of a scholarly and interesting History of the Huguenot Emigration to America by Prof. Charles W. Baird, of the University of New York.

One of the literary problems now under discussion is how long ought writers to work? Edward Everett Hale follows Bulwer in saying three hours of hard literary work is as much as any man can stand for any length of time. George W. Cable goes to his study at 9 o'clock in the morning and leaves it at five in the afternoon, only leaving the room for lunch. R. H. Stoddard begins work at 11 o'clock in the morning and does not leave it until four in the afternoon; besides this he works frequently at night. T. B. Aldrich goes early to his editing of the *Atlantic Monthly*, and leaves at lunch time. He writes only when the mood is on him.

Co-education as practiced in the majority of American colleges, has received a hearty endorsement from Rev. H. R. Haweis, the popular London clergyman, lecturer, and writer,

now on a visit to this country. Mr. Haweis believes that the English can take a great many hints from the joint education of men and women; that it is a system which has a refining influence on both sexes and much preferable to the system practiced in England, of having separate ladies' universities like Girton and Newnham. His ideas are the result of a three-weeks' visit at Cornell where, for sixteen years, co-education has been successfully tried.

General George B. McClellan died unexpectedly at his home at Orange, N. J., on October 29. His sudden death closes an honorable public career. A graduate of West Point, he fought with great bravery in the Mexican war. Between the close of that campaign and the breaking out of our civil war, he was busy in preparing military tactics, drilling troops, studying the military systems of other nations, erecting harbors and choosing sites for various public works. McClellan went into the late war as major-general of the Ohio volunteers. He rose to the position of major-general of the United States Army. His military career is still a subject of discussion. Since the close of the war he has followed his profession of civil engineering, and has held several important political offices given by the suffrages of the Democratic party. Most important of these was the governorship of New Jersey. In 1864 General McClellan was the Democratic candidate for president, running against Mr. Lincoln. He has been at the head of more than one important business enterprise. He was a man of rare abilities, thoroughly cultured, fair-minded, honest, and genial. Notwithstanding the bitterness, at times, of the controversy over his leadership in the army, the soldiers who fought under him have always loved and admired him. Sympathy in struggle binds men to one another;—the editor of *THE CHAUTAUQUAN*, was twenty years old and in the ranks as a first sergeant in a Pennsylvania regiment, and fought under "little Mac," as we called him, at the battle of Antietam. The second man to us was shot dead, we could have caught him as he fell in that fight, ours was the color company and the third color bearer fell on the field, it was a fierce battle and the contest was close, but our position, on foot, in the ranks, gave us no opportunity to judge of the generalship displayed on the field. History, however, will give to General McClellan, its highest meed of praise, and the highest honors of his career for his services on that memorable day. Antietam was General McClellan's great battle. In his private character he was a devoted member and elder of the Presbyterian church, in whose ranks he died. He was a great man, and history will give his name an honorable place among heroes and good men.

Canon Farrar has been having an ovation, as the newspapers delight to say, ever since he crossed the line into the states. We are glad that he so justly deserves the admiration the public gives him. His short addresses have been singularly earnest and kind, and his lectures on Dante and Robert Browning were appreciative studies, animated by great moral

earnestness. Through the columns of the *Brooklyn Magazine*, he advises America to make provisions for a Westminster Abbey. He gives many reasons, and good ones, too, for such a structure in this country.

The sixteenth annual report of the Massachusetts bureau of labor statistics is out, and it offers some interesting material for students of the labor question. A very important portion of the volume is that which deals with the problem of Sunday labor. It reaches these results: The greatest share of Sunday labor is done in connection with railroads, but in this case, it is rather for public accommodation than for profit, and that on the whole, it is not so exacting as week-day service. Thirty-two per cent of the working women of the state, and eleven per cent of the working men, work on the Sabbath.

One of the most pathetic events in the history of General Grant's last days was the final test of his strength. The morning after reaching Mount McGregor he decided to take a walk unaided, and from this to decide his condition. The result was disheartening. He found himself much weaker than he had supposed. That evening he wrote the following letter to Dr. Douglas:

"DR.: Since coming to this beautiful climate and getting a complete rest for about ten hours, I have watched my pains and compared them with those of the past few weeks. I can feel plainly that my system is preparing for dissolution in three ways—one by hemorrhage, one by strangulation, and the third by exhaustion. The first and second are liable to come at any moment to relieve me of my earthly sufferings. The time for the arrival of the third can be computed with almost mathematical certainty. With an increase of daily food I have fallen off in weight and strength very rapidly for the last two weeks. There cannot be a hope of going far beyond this time. All any physician or any number of them can do for me now is to make my burden of pain as light as possible.

"I do not want any physician but yourself, but I tell you so that, if you are unwilling to have me go without consultation with other professional men, you can send for them. I dread them, however, knowing that it means another desperate effort to save me, and more suffering."

Mr. E. B. Benjamin's Chautauqua Electrical Kit, prepared expressly to accompany Mr. Barnard's entertaining articles on "Electricity" now running in *THE CHAUTAUQUAN*, is giving splendid satisfaction. Many local circles have purchased the kit, and we have no hesitancy in saying that all ought to do so, if possible. It illustrates capitally a most fascinating subject.

The writer of the article on "Scientific Farming" in the present issue of *THE CHAUTAUQUAN*, has, by an oversight, failed to credit the movement to Chautauqua. The article shows how much the club, under the admirable direction of Major Alford and Mr. Charles Barnard is doing toward awakening an interest in out-of-door employments. Among all Chautauqua's daughters she has none fairer and more hopeful than the Chautauqua Town and Country Club.

C. L. S. C. NOTES ON REQUIRED READINGS FOR DECEMBER.

PREPARATORY LATIN COURSE IN ENGLISH.

P. 217. "Ar'chi-as." A Greek poet born at Antioch in the first century B. C., who came to Rome at an early age, where he spent the greater part of his life in teaching the Greek language and literature. Cicero was his pupil, and, in after years, defended his master in one of the most finished and pleasing orations he ever delivered. It was not a criminal prosecution, but a question of privilege. Archias had traveled under the patronage of Lucullus, and obtained the right of citizenship at Heraclea, an enfranchised town of Lucania. This entitled him to the same rights at Rome which he had enjoyed for more than twenty years. The pivotal question, as Cicero shows, was as to

his client's compliance with the conditions of the law. The evidence was satisfactory and the case reached a successful issue.

P. 220. "Mi-nu'ci-an col-on-nade'." The series of columns in front of the rostra where Caesar refused the diadem Antony presented.

"Priest of Pan." Such priests were supposed to be shepherds—protectors of the commonwealth. Pan was the Greek god of flocks and pasturage, and the inventor of pastoral music.

P. 221. "Lu-per-ca'lia." From *lupus* (wolf). Pan's most celebrated festival at Rome.

"Tar-quin'i-us." Not Superbus (the proud), but Lucius Tarquinius Priscus, who was a lawful king. He was assassinated because of the

suspicion that he intended to secure the succession for his son-in-law.

P. 223. "Merivales and Congreves." The former, Rev. Charles Merivale, (1808—), is best known as a historical writer, author of the great work, "The Romans under the Emperors." Sir William Congreve. (1670-1729). An English dramatist.

P. 225. "Æneid" e'ne-id or e-né-id. Virgil's great Latin epic. From Æneas, the hero whose fortune it celebrates.

P. 227. "Me-di-æ'-val." From *medias* and *ævum*. Middle age.

"Metamorphosis." From *meta* and *morphe*. Change of form.

P. 229. "Mantua." A province in northern Italy, beautiful and fertile.

P. 230. Min'cius." Now Mincio, a river in northern Italy, on whose banks, in modern times, a severe and decisive battle was fought by the French, Austrians, and Sardinians.

P. 232. "Dac-tyl'ic." A poetical foot of three syllables, one long and two short—the long syllable accented.

"Hex-am'e-ter." From *metros*, a measure, and the Greek numeral six. A verse of six feet—the first four are either dactyls or spondees, the fifth a dactyl, and the sixth always a spondee, or a foot of two long syllables.

P. 234. "Sib'yl-line." An adjective applied to things uttered or written by a sybil, or prophetic of Jupiter.

"Ti'phys." The pilot of the Argo.

P. 235. "Ar'go." The ship which carried Jason and his companions to Colchis, in quest of the golden fleece.

P. 237. "I-am'bic." A foot of two syllables—the first short, the second long.

"Pen-tam'e-ter." A verse of five metrical feet.

"Alexan'drines." A kind of verse consisting of twelve syllables, so called from a poem written in this measure on the life of Alexander.

P. 238. "Bac'chus." The god of wine.

"Ce'res." The goddess of corn and tillage.

"Mast." Nuts and acorns, the fruit of forest trees.

"And thou, whose trident," &c. Neptune, the god of the sea. He is said to have been the first to tame the horse.

"And thou, for whom the Cean shore," &c. Aristæus is meant. He was the reputed son of Apollo and the nymph Cyrene. Aristæus left Thebes and took up his residence in Cæa or Ceos, one of the islands of the Cyclades, a group in the Ægean sea. He first taught mankind the cultivation of bees.

"Pal'las." The Grecian goddess of wisdom; the same as the Roman Minerva. The olive tree was sacred to her.

"Thou, founder of the plow," &c. Triptolemus.

"And thou, whose hands the shroud-like cypress," &c. Sylvane, a demi-god who pined away and died of grief at the death of a boy of whom he was passionately fond. He was changed into a cypress tree.

"And chiefly thou, whose undetermined state," &c. Cæsar.

"And with thy goddess mother's myrtle, crowned," &c. "The myrtle tree was sacred to Venus, the mother of Æneas, from whom, according to Virgil, Cæsar descended."

P. 239. "Thu'le." In early history the extreme northern part of the habitable world—hence the Latin phrase "*Ultima Thule*." It was definitely located by many as one of the Shetland Islands, north of Scotland.

"Fasces," (fas'ses). Badges or insignia of authority; hence, in this line, the control of the sea.

"Te'thys." The grandest of the sea deities, wife of Oceanus, and daughter of Uranus and Terra.

"Balance." The constellation in the Zodiac, at which the sun enters the autumnal equinox.

"Maid." The constellation Virgo. Erigone, the daughter of Icarus, hung herself for grief, on account of the murder of her father; but was translated to heaven, and made the constellation Virgo.

"Pros'er-pine." The wife of Pluto, and queen of the lower world.

P. 241. "Thau'ma-tur'gy." The act of performing wonders.

P. 242. "Pro'te-us." A sea god. One of the sons of Neptune. He assumed many different forms.

"Or'pheus." A musician and performer on the lyre, and of fabulous ability. He played, the myths declare, with such a masterly hand that

savage beasts forgot their wildness, and the very trees were moved by his song. When, lyre in hand, he entered the infernal regions in search for his lost Eurydice, Pluto and Proserpine were charmed with his melody, the wheel of Ixion stopped, the stone of Sisyphus stood still, Tantalus forgot his perpetual thirst, and even the Furies relented.

P. 245. "Spense'rian." This stanza consists of nine lines, of which the first rhymes with the third, the second, fourth, fifth, and seventh rhyme, and the sixth, eighth, and ninth. It was first used by Edward Spenser, one of England's best poets, who belonged to the sixteenth century. His stanza admitted the Alexandrine line, and purposely some phrases which had become antiquated; but no other poet had a more exquisite sense of the beautiful. "His poetry is the most poetical of all poetry."

P. 247. "Fell Juno's unforgetting hate." Juno was enraged against Paris, the son of Priam, because he had given the prize of beauty, which was the golden apple, to Venus, instead of to herself. "From that time she became a bitter enemy of the whole Trojan race."

P. 254. "Æ'olus." In both Greek and Roman mythology, the god of the winds. He held them imprisoned in a cave, and let them loose only to further his designs, which were not always beneficent.

P. 255. "Eu'rus." The winds, as mythical personages, were known by the names, Zephyrus, Boreas, Notus, and Eurus, and all were servants of Æolus.

"Oron'tes." One of the Argonauts, the competent and trustworthy leader of the Lycians from Asia Minor.

P. 257. "Scyl'la." A ledge of dangerous rocks on the Italian shore along the strait between Sicily and the main land. Over against it on the Sicilian side is a whirlpool. In a storm the winds howl around the rocks furiously.

"Cy'clops." A savage race of gigantic stature, who inhabited the western part of Sicily. There are several different fabulous accounts of them, which do not agree.

P. 258. "Har'pa-ly-ce." A daughter of Harpalycus, king of Thrace. Being disconsolate after the death of her father, she fled from the abodes of men and lived in the forest. Owing to her swiftness it was impossible to capture her by pursuit, until she was entangled in a net.

P. 259. "Pa'phos." A city on the island of Cyprus where the goddess of beauty was worshiped. The inhabitants were effeminate and lascivious.

P. 262. "A-mar'a-cus." A plant peculiarly aromatic and fragrant.

P. 263. "Acida'lian." A surname of Venus, from a fountain in Bœotia sacred to her.

P. 264. "De mod'o-cus." A musician at the court of Alcinoüs, who sang in the presence of Ulysses.

"Hy'ads." A cluster of five stars, supposed to indicate rainy weather when they rose with the sun.

P. 266. "Danaan chiefs." Greeks. So called from Danaus, an Egyptian ancestor of the race.

P. 267. "Ith'a-cus." Ulysses; called Ithacus, from Ithaca, an island in the Ionian Sea.

"A'tre-us." Father of Agamemnon and Menelaus.

P. 277. "*Reliquias Danaum atque immitis Achilli*." The remnant of the Trojans who escaped the Greeks and the cruel Achilles.

P. 278. "Harpies." Horrible mythological creatures, with faces of virgins, bodies of vultures, feet and hands with claws.

P. 287. "Madness." As the god Apollo entered the cave, the Sibyl, influenced by his presence, became inspired; her countenance changed, her color came and went, and she appeared, in great measure, like one mad.

P. 288. "Dis." A god of the Gauls, same as Pluto.

P. 289. "Phleg'e-thon." A burning river of liquid fire, flowing through the under world.

"Orcus." The abode of the lost—hell.

"Furies." Avenging deities, tormentors of the wicked.

"Discord." A malevolent goddess. She is represented by artists, with a very ghastly look; her garment is torn, her eyes sparkle with fire, and in her bosom is a half-concealed dagger; her hair is entwined with hissing serpents, and on her head a bloody wreath. This line of Virgil is powerfully descriptive.

"Tar'tarus." According to the ancients, this was the deepest, dark-

est cavern of hell, where the most impious and guilty were punished.

"Ach'eron." A river of fire in the infernal regions.

P. 290. "Co-cy'tus." Another such river in Pluto's dismal realm.

"Cha'ron." The ferryman at the Styx, the principal stream passed in reaching the abode of the dead.

"Eld." Age—especially old age.

"Great nature ever young, yet full of eld."—*Spenser*.

P. 291. "Cer'be-rus." A monster three-headed dog guarding the entrance to Pluto's dominions.

P. 292. "Minos." One of the judges who minister retributive justice.

P. 293. "Death-wound." Her broken heart which the bodiless shade did not hide; a perpetual living agony.

"Mar-pe'sian grain." From Marpessa, a mountain in Paros, abounding in white marble of the finest grain or quality.

P. 294. "De-iph'o-bus." A son of Priam who had been betrayed, killed, and shamefully mutilated by Menelaus.

"Hec'a-te." The same as Proserpine.

"Avernian Shade." The shadowy realm below. There was supposed to be a mysterious connection between the cave at Lake Avernus and the infernal regions.

"Rhad'a-man'thus." He reigned a king on earth, with so much justice and impartiality, that, it was said, after his departure he became one of the incorruptible judges of the dead.

"Ti-siph'o-ne." One of the Furies who punish the wicked in Tartarus. She is represented with snakes hanging from her head, and wound, as bracelets, about her arms.

P. 295. "Hy-dra." A fifty- (some say a hundred) headed monster in the neighborhood of Lake Lerna, which Hercules, as one of his twelve labors, was required to destroy.

"Children of Titanic birth." The Titans are celebrated in the mythological fables of the Greeks as demi-gods, brothers of Saturn, who contested with him for the throne, but unsuccessfully.

"A-lo'e-us." A giant, son of Titan and Terra. His boys of prodigious size, when yet in their youth, made war against the gods of Olympus, but were killed by Apollo and Diana.

"Sal-mo'ne-us." He lived in Thessaly, but emigrated to Elis, where he built the town of Sal-mo'ne. His presumption and arrogance were so great that Jupiter destroyed him with his thunderbolts.

"Tit'y-os." A giant of huge proportions, and as great in wicked-

ness. His punishment was as great as could be conceived. Vultures were tearing out his vitals, which grew as they devoured them.

P. 296. "Lapith." The Lapithæ were a mythical people from the mountains of Thessaly, kindred of the Centaurs. They were the reputed inventors of bits and bridles for horses.

"Pi-rith'o-us." King of the Lapithæ. For his reckless daring of the gods, he was hurled down to Tartarus, and chained to a rock.

"Ixion." Another king of the same tribe, who for treachery and impious ingratitude had his hands and feet chained to a wheel that was perpetually rolling. The crime for which he was thus punished was the murder of his father-in-law, to avoid paying the bridal gifts he had promised.

"Sis'y-phus." A king of Corinth who was fraudulent, avaricious, and deceitful. For his wickedness he was sentenced in the lower world to continually roll up hill a huge stone which as soon as it reached the top rolled back again.

"Tan'ta-lus." Son of Jupiter and a nymph. For divulging some of the secrets entrusted to him by Zeus, a heavy punishment was inflicted upon him in the lower world. He was afflicted with a terrible thirst and placed near an abundance of water which constantly receded just beyond his reach. Over his head also hung fruit on branches which always eluded his grasp.

P. 297. "The'se-us." Son of Ægeus, and king of Athens. He was one of the Argonauts, and engaged in many heroic expeditions,—fought with the powerful Amazons, slew the Minotaur, and carried off Helen.

"Phle'gy-as." Father of Ixion and Coronis. Incensed against Apollo, he set fire to his temple, and for his impiety was severely punished.

"Palaestral games." Wrestling, and other manly sports.

"Teucer." He was the first king of Troy, hence the Trojans were called Teuceri.

"Ilus." He founded, in the plain of Troy, the city of Ilium.

"As sar'a-cus." A later king of Troy. The descendants of Æneas are called by Virgil, "*domus Assaraci*."

"Dardany." So called from Dardanus. Troy.

P. 299. "Le'the." The river of oblivion or forgetfulness. Souls drink of this river, and forget all they said or did on earth. Those in Elysium, and destined by the Fates to inhabit new bodies, drink to destroy all remembrance of the joys they have to leave.

NOTES ON REQUIRED READING IN "THE CHAUTAUQUAN."

HOW TO LIVE.

1. "Am'a-dis" of Gaul. A hero of romance whose father was the fabled King Perion of France. His history, written by a Portuguese, Vasco de Lobeira, who lived in the fourteenth century, is considered the best of all romances written upon chivalry. Gaul is Wales, and the characters and localities are British.

2. "U-to'pi-a." The name of a political romance written by Sir Thomas More. An imaginary island, gives the scene of his plot, and imaginary inhabitants are the characters who lived in a state of perfect happiness. The name Utopia is now used to signify in a figurative sense a state of ideal perfection.

3. "Syb'a-ris." A city situated in the southern part of Italy, belonging to ancient Greece. It was founded by the Achæans about 720 B. C. It was exceedingly prosperous, and the inhabitants soon became famous for their luxury and effeminacy. It is said that no trade of any kind was allowed in the city, lest the noise attending it might disturb the people. About 500 B. C. the city was destroyed by the inhabitants of Crotona. Its site is now covered by a marsh. From this city is derived the English word sybarite, signifying a person devoted to pleasure and luxury.

4. "Pestalozzi," Johann Heinrich, pes-ta-lot'see. (1746-1827). A Swiss teacher, and a reformer in educational ideas.

5. "Gérando," Joseph Maria de, Baron, zeh-ron-dó. (1772-1842). A French statesman and philosopher. He was made professor of law in the faculty of Paris in 1828, which position he held until his death. He was the author of several philosophical works.

6. "Helmholtz," Hermann Ludwig Ferdinand. (1821 —). A distinguished German student of physiology. His popular lectures on scientific subjects have been translated into English. —"George Herbert," (1593-1633). An English writer. Among his poems are some devout lyrics which will always be remembered with pleasure.—*E. E. Hale*.

ELECTRICITY.

1. "Vulcanite." Called also ebonite. India-rubber which by a process called vulcanization, has been rendered hard like horn. This condition is brought about by combining the caoutchouc with sulphur by means of a very high temperature,—a process discovered by Prof. Goodyear. Vulcanite is used extensively for manufacturing buttons, combs, etc.

2. "Cunæus." (1586-1638). A Dutch scholar, one of the most learned men of his time. He was appointed professor of Latin at Leyden in 1611, and a little later was also called to the chair of law. He was the author of several works, most of which he wrote in Latin.

3. "Musschenbroek," Pieter van, mus'kenbrook. (1692-1761). A Dutch mathematician. He adopted the Newtonian system of philosophy, and helped introduce it into Holland. He held the chair of mathematics at Leyden for several years.

4. "Dr. Watson," Richard. (1737-1816). An English prelate. He was professor of chemistry in Cambridge. Among the works which he published, is one in five volumes entitled, "Chemical Essays."

SUNDAY READINGS.

1. "Galloway." A district comprising the south-western part of Scotland.
2. "Rutherford." (About 1600-1661). He was graduated from the University of Edinburgh in 1621, and became minister in the parish of Anwoth in 1627. He was distinguished among the Presbyterian ministers of his time, and his treatises on theology, of which he wrote a number, were highly esteemed.
3. "Usher," James. (1580-1656). Educated in Trinity College, Dublin, he rapidly rose in the ministry. In 1624 he was raised to the primacy of the Irish church. He was the author of numerous works which have been collected and published in a complete edition by the University of Dublin.

MODERN ITALY.

1. "Mincio," min'cho. A river in northern Italy, tributary to the Po. It was several times the theatre of war.
2. "Radetzky," Joseph Wenzel. (1766-1858). An Austrian general. He was in command of the troops fighting against the Sardinians.
3. "Count Pellegrino Rossi," ros'ee. (1787-1848). An Italian statesman. He was made a peer by Louis Philippe in 1839 and in 1845 sent on an embassy to Rome. He first, favored, and then tried to prevent the reformation instituted by Pope Pius IX. He was appointed prime minister by the pope during the stormy times of 1848, and sought to bring about a union of all the Italian states. While on his way to attend the opening session of parliament, he was surrounded by a crowd and stabbed to death.
4. "Gaeta," gâ-â-ta. A fortified city of southern Italy, situated on a gulf of the same name. It is a very ancient city, having been in existence before Rome. Aeneas is said to have founded it. In 1815 the Austrians made it part of the kingdom of Naples. Pius IX. remained there from the time of his flight in 1848 until the latter part of 1850, when he returned to Rome.
5. "Oporto." A city of Portugal, on the right bank of the Douro, about three miles from the sea.
6. "Tchernaya," cher-ni'â.
7. "Ticino," te-chee'no.
8. "Köeniggratz," kō'nig-graits. A fortified town of Bohemia at the junction of the Adler and the Elbe rivers.
9. "Lissa." An island in the Adriatic Sea belonging to Dalmatia, a dependency of Austria.
10. "Custoza," koos-tote'sa. A village of Italy in the province of Verona. The famous "quadrilateral" of fortresses, comprises Verona, Legnago, Peschiera, and Mantua.
11. "La mar'mo-ra, Alfonso di. (1804-1878). An Italian general. He was, during the whole Crimean campaign, commander of Sardinian forces; and the chief adviser of Victor Emanuel. He was withdrawn from service on account of this defeat at Custoza.
12. "Margaret," written also Margarita, and Margaretha. The only daughter of Prince Ferdinand of Savoy, Duke of Genoa.

ITALIAN BIOGRAPHIES.

1. "Ghirlandaio," Domenico del, gheer-lân-dâ'yo. (1451-1495).
2. "Vasari," Giorgio. (1512-1574). An Italian artist and sculptor, and one of the founders of the Academy of Fine Arts in Florence. He also wrote many biographies of celebrated Italian artists, which remain as standard works of authority.
3. "Torregiano," Bartolomeo, tor-rê-jan'ô. Died about 1673. A landscape painter.
4. "Pieta." "The only unfavorable criticism recorded against this noble figure (the Virgin's) is the trivial remark of one of the cardinal's suite, that he would be glad to know where could be found a mother younger than her son. The artist dryly answered: 'In paradise.' The reply was something more than a witticism, as implying that in dealing with subjects beyond the range of reason, and which, of necessity soar into the highest sphere of faith, the artist has a right to be freed from the trammels of mere worldly hypercriticism. The youthful loveliness of her to whom was given the high lot of bearing the earthly form of our Lord, is as strictly admissible as were the gray hairs and

venerable features of Him in whom age and decay are impossible."
—*Garnet Series. Michel Angelo.*

5. "Pope Julius II." (1441-1513). The secular name of this pope was Giuliano della Rovere. After his elevation to the pontificate, his life was chiefly military, and his one great thought was to free Italy from foreigners, and the papal see from secular powers. He laid the corner-stone of St. Peter's Church.
6. "Sistine Chapel." One of the apartments of the Vatican, built in honor of Pope Sixtus IV.
7. "Clement VII." (1475-1534). The pope who assumed this name was Giulio de' Medici. He had been carefully educated by his uncle, Lorenzo de' Medici. It was this Clement VII. who refused to grant a divorce to Henry VIII. of England, which refusal led to the English reformation.
8. "Vittoria Colonna." (1490-1547). The daughter of Fabrizio Colonna who belonged to the celebrated, noble Roman family of this name. In her seventeenth year she was married to the Marquis of Pescara, the famous general who met his death on the battle-field of Pavia. This loss caused her to lose her reason for a while. When restored she gave herself up to literary works. The last years of her life she passed in the convent of St. Catharine in Viterbo.
9. "Mrs. Jameson," Anna. (1797-1860). A British authoress, daughter of Mr. Murphy, painter in ordinary of Princess Charlotte. Her marriage proving an unhappy one she soon left her husband. She traveled extensively and published many books of high merit, especially her works upon Christian art and archæology.
10. "Copernican System." The author of this system was a German astronomer, Copernicus. (1473-1543).
11. The Dutchman who invented the telescope was Hans Lippersheim, a spectacle maker of Holland.
12. "Count Maurice of Nassau." (1567-1625). The second son of William of Orange. After the murder of his father he was proclaimed governor of Holland and Zealand. As a leader in military affairs he was greatly distinguished, being considered one of the greatest generals of his age.
13. "Dominican Order." This order of friar preachers was founded by Dominic, a saint of the Roman Catholic church, who was born in Castile in 1170, and died in Bologna in 1221. The part they took in establishing and enforcing the Inquisition will ever render their name hateful. The Franciscans were their great rival order.
14. "Inquisition." "The tribunal established in various Roman Catholic countries to search out and try persons accused of heresy, as well as certain other offences against morality or the canons of the church."
15. "Urban VIII." The pope known by this name was born in Florence in 1568 and died in Rome in 1644. His secular name was Maffeo Barberini. He was a great patron of science and arts.
16. "The Libration of the Moon." An apparent balancing motion of the moon by which portions of the opposite edges alternately appear and disappear.

ROMAN AND ITALIAN ART.

1. "Nicola Pisano." Nek'o-lâ pe-sâ'no, or Nicola of Pisa.
2. This fidelity to nature which characterized Giotto is best illustrated by the reliefs of the campanile. Take the one representing shepherd life.
3. "Orcagna," or-kan'yâ. Andrea; or Andrea di Cione. (1323-1389?).
4. "Ghiberti," gee-bair'tee. (1378-1455?) Lorenzo had learned his art from his father-in-law who was a goldsmith. "The goldsmiths of those days were not merely artisans, but artists in the higher sense of the word; they generally wrought their own designs, consisting of figures and subjects from sacred or classical story exquisitely chased in relief, or engraved or enamelled on the shrines or chalices used in the church service; or vases, dishes, sword-hilts, and other implements."
5. "Donatello," do-nâ-tel'ô. (1383-1466). Donatello came from a poor family, but found a patron in Cosmo de' Medici. His name was Donato di Betto Bardi, but, like the majority of the sculptors and painters of the period, he was not known by his real name. Donatello's works in *relievo* were among his most popular productions.

6. "Verocchio," vāir-rok'ke-o. (1432-1488). This sculptor was, also, a goldsmith and a painter. He was the first to take moulds of the human form to aid in designing.

7. "Robbia," rōb/be-ā. (1400?-—). He "acquired the art of covering pottery with stanniferous enamel, long practised by the Saracens in Majorca, and in 1438 produced and placed in the Duomo at Florence his first work, the 'Resurrection,' consisting of a plaque having a blue ground on which are raised figures in white. From this commencement is dated the origin of the best art (of pottery and porcelain) in Europe."

8. "Leonardo da Vinci," la-o-nar'do dā vīn'chee. (1452-1519).

9. "Sansovino," sān-so-vee'no. His name was Andrea Contucci.

10. "Holy House of Loreto," lo-rā'to. A town of Italy about three miles from the Adriatic. "The chief interest of this place is the magnificent sanctuary of Our Lady of Loreto, which draws hither thousands of pilgrims yearly. This vast building, designed by Bramante, is said to contain the house in which the Holy Family dwelt at Nazareth."

11. "Jacopo Tatti," yā'ko-po tā't'tee. (1479-1570). Jacopo was celebrated as an architect, as well as sculptor. The library of San Marco at Venice is his work, also the Palazzo Cornaro.

12. "Bernini," His chief sculptures are the group of Apollo and Daphne in the Villa Borghese, the statue of St. Longinus and St. Theresa with the angel. He built the Palazzo Barberini and was invited to Paris in 1665, to finish the Louvre, a work he did not do as his plans involved the destruction of all the buildings.

13. "Algardi," āl-gār'dee. (1598?-1654). His chief works are a bronze statue of Innocent X., a monument of Leo XI. in St. Peter's, and, on an altar in the same church, the largest work in alto-relievo ever executed. It represents the repulse of Attila by St. Peter and St. Paul.

14. "Canova," (1757-1822). Canova's first work was done at Rome where he acquired considerable celebrity. In 1802 he went to Paris on invitation of Napoleon, and while there executed a statue of that emperor. The most interesting work of Canova, for Americans, is his statue of Washington.

15. "Tenerani," tan-a-rā'nee; "Bartolini," bār-tō-lee'nee; "Vela," va'lā; "Finelli," fee-nal'lee; "Fracaroli," frāk-kā-rō'lee.

16. "Symbols." Christian art began by representing Christ and his doctrines under the simplest possible forms. The first attempt at expressing Christ by a symbol was the use of the Greek letters X (ch) and P (r), the first letters of the Greek word for Christ, in a monogram. The position of the X was often changed to make it resemble a Greek cross. The letters of the Greek word for fish, *ichthus*, form the initials of the Greek expression Jesus Christ, the son of God, the Saviour, so that this word, or simply a picture of a fish, was frequently employed. This symbolism gradually advanced to adopting the figure of a youth with a lamb or tending a flock, to represent Christ. The dove is used to represent peace; the hart, eagerness for the truth; the peacock, immortality, or eternity; the laurel crown with a cross, or the monogram of Christ, victory; the palm, peace; the anchor, hope or safety; the vine and its branches, Christ and his apostles; the ship, the church; the cross, redemption; the cock, watchfulness. From this simple beginning the Christians gradually began to represent the stories of the Bible, in crude pictures.

17. "Cimabue," che-mā-boo'a. (1240?-1302?). He was a Florentine. His best known work is a Madonna in the church of Santa Maria Novella, at Florence. It is the earliest work by an Italian in which the stiff Byzantine style is overcome and there is an approach to freedom and naturalness. So proud were his countrymen of this picture that they carried it in public procession from the studio to the church. There are a few frescoes in the upper church of St. Francis at Assisi, which are attributed to Cimabue.

18. "Navicella." This mosaic picture stands above the three doors of the portico in the vestibule. Vasari describes it as "a truly wonderful work and deservedly eulogized by all enlightened judges." It is, however, so restored that but little of the original remains.

19. "St. Francis at Assisi." This church at Assisi was one in which all the great artists of the time tried their powers. Assisi was the birth place of St. Francis, and the cathedral, the first Gothic church E-dec

built in Italy, was erected between 1228 and 1253. The convents and churches of Assisi all contain splendid specimens of painting.

20. "Taddeo Gaddi," tād-da'o gād'ee. (1324?-1387). His father had been a painter and a friend of Cimabue, and Gaddi was the favorite pupil as well as godson of Giotto. His most famous picture is a fresco called the Arts and Sciences in the Spanish chapel at Florence. There are four pictures in the Louvre attributed to him.

21. "Duccio," doot'cho. (— 1340). His master-piece mentioned in the text, had the honor of being carried in public procession like Cimabue's Madonna. Another fine piece of work by Duccio is the designs in the pavement of the Siena cathedral executed in marble.

22. "Simone Memmi," see-mo'nā, mem'mee. Born about 1285. Petrarch wrote two sonnets in honor of Memmi in reward for the picture of Laura which the latter had painted for him. In one of his church frescoes Memmi also introduced the portraits of Laura, Petrarch, and Cimabue. This practice of introducing the heads of contemporaries became very common among later artists.

23. "Lorenzetti," lo-ren-zat'tee. (1257-1340).

24. "Masaccio," Mā-sāt'cho. His real name was Tommaso Guidi. (1401?-1428.)

25. "Fra Angel'ico," gwēe'do dee pee-a'tro. He was also called da Fiesole and Il Beato.

26. "Benozzo Gozzoli," ba-not'so got'so-lee. (1405-1485).

27. "Lippi," lep'pee. (1412-1469).

28. "Chiara scuro," kyā-ro-skoo'tro. "It comprehends not only light and shade, without which the form of no object can be perfectly represented, but also all arrangements of light and dark colors in every degree; in short, in accordance with the compound word composing its name, which we have adopted from the Italian, the light and dark of a picture."—*Phillips*.

29. "Bartolomeo," bār-tol-o-mā'ō. (1469-1517). Called also Il Frate. His name was Baccio della Porta. His devotion to Savonarola was so great that he burnt all his early pictures. After the death of the preacher, Baccio joined the Dominicans and took the name of Fra Bartolomeo, by which he is usually known.

30. "Sarto," Andrea, "the tailor's son." His real name was Andrea d'Agnolo, or Vanucchi, some say. (1488?-1530).

31. "Squarcione," skwār-see o'nā. (1394-1474) This artist spent many years in travelling through Italy and Greece collecting works of art for his school. He is said to have had one hundred and thirty-seven pupils and assistants in his schools.

32. "Mantegna," mān-tān'yā. (1431-1506). His most famous works are the altar-piece of San Zeno at Verona, and a series of pictures representing the Triumph of Julius Caesar at Hampton Court. Mantegna introduced the practice of engraving his designs on copper plate.

33. "Bellini," bel-lee'nee.

34. "Oil painting." The introduction of oil-painting into Italy is said to have been on this wise. A painter from Messina in Sicily, Antonello, saw a picture in oil at Naples, from Van Eyck. He immediately went to Flanders and learned the secret of the medium. In 1451 he divulged this secret to the Venetian Domenico from whom it has been said, probably falsely, that Gian Bellini stole it, by introducing himself into Domenico's room in disguise. It is probable that Antonello gave the process to several of his friends and the knowledge of the method was spread in that way.

35. "Giorgione," jor-jo'na. (1477-1511); "Titian," tish'an. (1477-1576).

36. "Tintoretto," tin-to-rēt'to. (1512-1594). His real name was Giacomo Robusti. "Veronese," va-ro-nā'za. (1528-1588).

37. "Perugino," pa-roo-jee'no. The name given to Pietro Vannucci (vān-noot'chee) from Perugia, his birth place.

38. "Santi." This name is usually but incorrectly written Sanzio.

39. "Correggio," kor-ēd'jo. Antonio Allegri. (1494-1540). Among the best of Correggio's pieces are the Madonna della Scodella at Parma, Mercury teaching Cupid his Letters, and Ecce Homo in the National Gallery of England, the Antiope and the Mystic Marriage of St. Catharine in the Louvre, and a Nativity in the Dresden Gallery.

40. "Parmigiano," par me jā'no. (1504-1540). Francesco Mazzuoli was called Parmigiano from his birth place, Parma. This artist combine both the styles of Correggio and Michel Angelo, adding a pecu-

liar quality of his own, which is called grace. He studied in various cities of Italy, and returning to Parma, began to paint the choir of a church. The work was so slow that the painter was thrown into prison for breach of contract. He was afterward released and fled, dying in exile.

41. "Tibaldi," tee-bal'dee, also called Pellegrino Pellegrini. (1527-1598). Tibaldi was a native of Bologna. His most important paintings were the frescoes he executed for Phillip II., of Spain, in the Escorial palace in Spain. He was also an architect. The façade of the Milan Cathedral is Tibaldi's work.

42. "Primaticcio," pree-mā-teet'cho. (1490-1570). Famous for the works he executed in the castle of Fontainebleau for Francis I., of France.

43. "Carracci," kār-rāt'chee. Lodovico of Bologna was the founder

of the school. In order to fit himself for the work, he is said to have visited the headquarters of all the different schools and to have studied their master-pieces.

44. "Reni," rā'nee. (1575-1642). The heads of Reni are considered little inferior to Raphael's. His school became one of the most popular in Europe. His works are very numerous, almost all the European galleries having more or less of them. The *Aurora* at Rome is considered his best work.

45. "Domenichino," do-men-e-kee'no. (1581-1641). The masterpiece of Domenichino, here mentioned, is hung as a companion piece to Raphael's *Transfiguration*.

46. "Caravaggio," kā-rā-vād'jo. (1569-1609); "Spagnoletto," spē-nyo-lēt'to. (1576-1672); "Salva'tor Ro'sa." (1615-1673).

TALK ABOUT BOOKS.

One of the most beautiful and appropriate of the holiday books published, is "The Sermon on the Mount."* The numerous illustrations, many of which are full page, are taken from the leading artists, done in their best style, and include many striking interpretations of the noble words. The decorated borders and engrossed texts add greatly to the beauty of the volume. The introduction is written by E. E. Hale in his happiest manner. He gives all the circumstances attending the utterance of this sermon, the description and history of the place where it was delivered, and then proceeds with a masterly analysis of the sacred discourse.

"Nature's Teachings"† has for its object, as the author says, "to show the close connection between Nature and human inventions, and that there is scarcely an invention of man that has not its prototype in Nature." For one among the many examples cited, it is shown that in the skeleton of a herring there exists a startling resemblance to the ribs of a ship; and yet the process of learning to make the latter was extremely tedious as it developed from the rude dug-out. And all the while inventors were laboring and seeking for better plans this perfect little pattern was moving in the waters right before them. The book is full of surprises. With ruthless hand Dr. Wood destroys many of the fancies which have been taken for realities, but at the same time he points out a realm of truth more wonderful than all he destroys. On reading the facts related one can but exclaim: "Truth is stranger than fiction."

Lord Byron's "Childe Harold"‡ is one of those rare combinations of romance, imagination, and description that offers to an artist an endless field for interpretation. The latest attempt to make a fine edition out of the poem has been very successful. The works of several well-known artists have been employed to illustrate the book, while in binding and printing it is a model of fineness and beauty.

A new edition of Frank Stockton's irresistibly funny story "Rudder Grange"§, is out. As long as people rent their domiciles and keep house, Rudder Grange will never lose its freshness and wit. It is made doubly attractive in its new holiday form by Mr. A. B. Frost's interpretations of its characters and situations. The publishers have done their part in both printing and binding.

Mrs. Harrison's "Bric-a-Brac Stories"¶ is a good thing. It is a novelty indeed, to find, growing out of a Fifth avenue drawing room, a collection of tales such as these. They seem to belong only to Norwegian grandams, to Welsh firesides, and Spanish castles. The hints for the stories have been gathered from a large number of tale-tellers, but have been modernized, embellished, and changed to suit the taste and fancy of the writer. Walter Crane's illustrations and bric-a-brac cover add largely to the charm of the book.—Another tolerably interesting story

from the same house is "Winter Fun."** It is a book for the young folks, which in story form describes all the mirth and sports of a winter in the country. The vigorous sports described give a hearty tone to the book in spite of the rather tame style of the story.

The "Illustrated Library of Wonders"† which for several years has been a standard favorite among young people fond of information in an entertaining style, is being put into a new dress by the Scribners. Six volumes of the series are now out. Three volumes will be added each month until the twenty-four volumes are published. The books are much improved in every way.—An entirely new book of wonders from Scribner's is *Marvels of Animal Life*‡. It contains some of the results of Mr. C. F. Holder's gleanings among animals and is so astonishing that if we did not know the author's reputation for scientific exactness, we would be inclined to believe that he had touched up his stories with a very fertile imagination. There is no doubt, however, about these wonderful stories; they are true. The descriptions are admirable and the illustrations increase the value of the book which in typography and binding is both unique and pretty.—Another of Messrs. Scribner's works is *Hornaday's Two Years in a Jungle*||, a work of great interest to both scientists and general readers. It contains the results of two years' hunting in India, Ceylon, the Malay Peninsula, and Borneo. The narrative is brimful of incidents, told in an easy, off-hand style. The observations are mainly on the animal life of the countries, and are recorded with exactness. It is a pity that some of the sketches are so crude, and that a less sensational design had not been chosen for the cover.

To the many fine editions of poetical works brought out for the holiday trade, two very beautiful ones have been added by Crowell & Co. The first is a complete Tennyson§ prepared from the author's text, and containing many of the miscellaneous and early poems which are usually and in several cases, we think, wisely omitted from his works. The book is elegantly gotten-up; paper, printing, and engravings being most satisfactory. The second work is a collection of *Red-Letter Poems*|| so the compiler calls them. The collection runs from Chaucer down to our own time, and contains the majority of the poems which have been picked upon by such compilers as Ward, Mackay, and Bryant for their works. It has been ably edited, and altogether is as attractive a book of miscellaneous poems as we know of.

**Winter Fun*. By William O. Stoddard. New York: Charles Scribner's Sons. 1885.

†*Mountain Adventures*. By J. T. Headley. *Wonders of Sculpture*. By Lewis Viardot. *The Wonders of the Heavens*. By Camille Flammarion. *Wonders of Glass-Making in All Ages*. By A. Sauzay. *The Wonders of Optics*. By F. Marion. *Wonders of Bodily Strength and Skill in All Ages and Countries*. Translated and enlarged from the French of Guillaume Depping by Charles Russell. New York: Charles Scribner's Sons. 1885. Per vol. \$1.00.

‡*Marvels of Animal Life*. By Charles Frederick Holder. New York: Charles Scribner's Sons. 1885. Price \$2.

||*Two Years in a Jungle*. By Wm. T. Hornaday. New York: Charles Scribner's Sons. 1885. Price \$4.

§*The Poetical Works of Alfred, Lord Tennyson*. Complete edition from the Author's Text. New York: Thomas Y. Crowell & Co.

¶*Red Letter Poems*. By English Men and Women. New York: Thomas Y. Crowell & Co.

**The Sermon on the Mount*. Illustrated. Boston: Roberts Brothers. 1886. Price \$7.50.

†*Nature's Teachings*. By the Rev. J. G. Wood, M. A., F. L. S. Boston: Roberts Brothers.

‡*Childe Harold's Pilgrimage*. By Lord Byron. Illustrated. Boston: Ticknor & Co. 1886.

§*Rudder Grange*. By Frank R. Stockton. Illustrated by A. B. Frost. Published by Charles Scribner's Sons. Price \$2.

¶*Bric-a-Brac Stories*. By Mrs. Burton Harrison. Illustrated by Walter Crane. New York: Charles Scribner's Sons. Price \$2. 1885.

In "Hidden Sweetness"* one finds a cluster of short poems breathing forth the fragrance of a life attuned to the Divine will. No matter whether the verse gives expression to pain or pleasure, joy or sorrow, the keynote of faith and hope is struck, and resounds with clear, rich tones. Fitting emblems of the thought expressed are the beautiful flowers which adorn the pages. The book is especially suitable for a Christmas gift.

"A Little Country Girl"† is a pleasant story that must especially interest young girls everywhere, in country or city. Like its little heroine in the brilliant, fashionable circles at Newport, the book bears with it a modest, unassuming manner, which is in itself a force for good, and will always gain many friends among the noble and the true.

"Sugar and Spice and All That's Nice"‡ describes itself in the title. It is a veritable store-house of good things for the little ones. The first thirty-six pages are filled with selections from the melodies of Mother Goose. After these come verses from many other sources all culled with greatest care. The book is profusely illustrated with just such pictures as delight children's hearts.

Sir Walter Scott's "Marmion"§ is one of the choicest poems in the English language. It is quite worthy of the labor that has been bestowed upon the new edition of it. The quaintly devised covers of the book are eminently fitted to the knightly tale they enclose, and its illustrations almost repeat the story, so closely and clearly do they represent the text.

¶Ten Christmas days of historical importance have been made subjects of short, picturesque sketches by Hezekiah Butterworth. The eventful days are well selected, and are of such a variety that they give the illustrator ample scope for the exercise of his power, and he has improved his opportunity, furnishing several very fine full-plate engravings.

Miss Cleveland's book,|| the appearance of which was eagerly awaited by the reading public curious to see the production of the woman occupying the highest social position in the country, proves to have in it that merit which will render it worthy of the recognition it has received. It is a collection of nine short articles, from the first of which the book is named. The last five are historical, being called "Studies in the Middle Ages." The book shows a wide and careful reading on the part of its author, and a high culture. Almost every page reveals as the nucleus around which its thoughts are gathered, the thought of some other author. Her book shows the deepest appreciation of what she conceives to be the primary essential of all true poetry—faith in a future higher life.

Marion Harland has prepared for the public another draught of her excellent common sense. In the present book the nursery** is the subject. This field has not been worked so thoroughly by other writers on home affairs as those of which the previous books in the Common Sense Series treat, while in importance it is beyond them all. The talks go directly to the point. The remonstrances with mothers against treating Baby according to the conventional mode, instead of the dictates of reason are well made. The hints and recipes are practical. It is a useful book.

Davy and the Goblin†† is a good story. Davy is a real, live boy, and the Goblin keeps up the reputation of his race by his capers, contortions, and transformations. We are among those who believe in fairy stories for boys and girls. We believe they awaken imagination, cultivate fancy, and keep young minds clean. This Goblin of Davy's and the adventures into which he leads the young man are characterized by

a good-natured whimsicality, and refreshing novelty that are not common in fairy books—most of which are hackneyed revisions of Grimm's Hausmärchen and the like.

"The Joyous Story of Toto"‡‡ is a book which will be the delight of children's hearts at Christmas time. In this witching season delightful fables find just the element they need to make them thoroughly enjoyable. And these stories told by a bear, a squirrel, a coon, the wood-pigeon, and other creatures, to little Toto and his blind old grandmother, who lived in a little cottage at the edge of their wood, are very interesting.

One of the most encouraging signs of the broader and more diffused education which is to be the inheritance of the near future, is the publication of so many books of history and general information for the boys and girls. From G. P. Putnam's Sons come a number of these volumes, all of which deserve high commendation. "Historic Boys," with its stories of twelve young heroes, who, "if they had not lived out their teens could have rightly claimed a place in the world's annals," but whose famous manhood is used by the author only as a fine setting for their youthful days, is a work full of interest. Its intrinsic worth, beautiful binding, fine illustrations, and heavy paper make it in every sense a desirable book.† —Of the series, "The Story of the Nations," the books on Greece‡ and Rome,|| the first published, will certainly make a great demand for all that are to follow. With their maps their pictures, and their history which reads like a novel, they will help much towards laying a broad and deep foundation for general information and culture.—"Plutarch's Lives,"‡‡ in two neat little volumes, containing pictures of many of the places referred to, and portraits of the characters, will be found carefully prepared for younger readers. Much has been pruned from the complete work, and some of the biographies entirely omitted; but the original text largely remains. And thus, this author, "who wrote a hundred books" for men, "and was never dull," comes now craving acquaintance with the boys and girls.—In the same manner the "Father of History" himself, also comes to tell the story of the days preceding his time—the days before 446 B. C. The two books containing the writings of Herodotus‡‡ are uniform with the volumes of Plutarch, and the four books form a fine set.

A very good book on the Sabbath question** has lately been published, and will be received with favor. The writer, W. W. Everts, D.D., manifests not only becoming earnestness, but decided ability for the work undertaken, and canvasses the whole subject in a masterly manner. It is in twenty-two short chapters, clear and incisive, each presenting some distinct phase of the general subject, and so strong in facts, arguments, and appeals to the judgment and conscience of thoughtful Americans, that it is sure to receive from them more than a cursory reading.

Among late text books are "Welsh's Complete Rhetoric,"†† a lively written work, enriched by an abundance of examples; a very valuable book on "Domestic Hygiene;"‡‡ a new idea in school readers||| in the shape of readings in natural history made so simple, and graded so exactly that there is something suitable for all sizes; and an arithmetic‡‡ notable for its disturbance of the orthodox place for the chapter on decimal fractions, it being placed before addition. This book contains a capital help in a vocabulary of terse, easily remembered definitions.

*The Joyous Story of Toto. By Laura E. Richards. Boston: Roberts Brothers. 1885. Price, \$1 50.

†Historic Boys. By E. S. Brooks. New York: G. P. Putnam's Sons. 1885. Price, \$2 25.

‡The Story of Greece. By James A. Harrison. New York: G. P. Putnam's Sons. 1885. Price, \$1 50.

||The Story of Rome. By Arthur Gilman. New York: G. P. Putnam's Sons. 1885. Price, \$1 50.

‡‡Plutarch's Lives. Selected and edited by John S. White, LL.D. New York: G. P. Putnam's Sons. 1884. Price, 2 vols., \$2 50.

‡‡The Histories of Herodotus. Selected and edited by John S. White, LL.D. New York: G. P. Putnam's Sons. 1885. Price, 2 vols., \$2 50.

**The Sabbath, its Permanence, Promise, and Defence. By W. W. Everts, D.D. New York: E. B. Treat. 1885. Price, \$1.00.

††Complete Rhetoric. By Alfred H. Welsh, A.M. Chicago: S. C. Griggs & Co. 1885. Price, \$1.50.

‡‡Domestic Hygiene. By George Wilson, M.A., M.D. Edited with notes and additions, by J. G. Richardson, M.D. Philadelphia: P. Blakiston, Son & Co. 1885.

|||Neighbors with Claws and Hoofs, and Their Kin; Neighbors with Wings and Fins; and some others. By James Johannot. New York: D. Appleton & Co. 1885.

‡‡A Practical Arithmetic. By G. A. Wentworth, A.M., and Rev. Thomas Hill, D.D., LL. D. For grammar schools. Boston: Published by Ginn & Co. 1885.

*Hidden Sweetness. By Mary Bradley. The illustrations from drawings by Dorothy Holroyd. Boston: Roberts Brothers. 1886.

†A Little Country Girl. By Susan Coolidge. Boston: Roberts Brothers. 1885.

‡Sugar and Spice and All That's Nice. Selected by the editor of "Quiet Hours." Boston: Roberts Brothers. 1885.

§Marmion. By Sir Walter Scott. Boston: James R. Osgood & Co. 1885.

¶Wonderful Christmases of Old. Text by Hezekiah Butterworth. Drawings by Fernand Lungren. Boston: D. Lothrop & Co. 1885. Price, large quarto, cloth, \$1 00; leather, \$1 00. Small quarto, cloth, \$2 00; satin, \$4 00.

||George Eliot's Poetry and Other Studies. By Rose Elizabeth Cleveland. New York: Funk & Wagnalls. 1885.

**Common Sense In The Nursery. By Marion Harland. New York: Charles Scribner's. Price, \$1 00.

††Davy and the Goblins, or What Followed Reading Alice's Adventures in Wonderland. By Charles E. Carrye. Illustrated. Boston: Ticknor & Co. 1886.

"Hearing and How to Keep It,"* is a timely little treatise, belonging to the series of American Health Primers. It treats, in three parts, of the anatomy, the diseases, and the hygiene of the ear, and is well illustrated. To the same series belongs "Summer and Its Diseases,"† a thoroughly practical manual, suitable for home use, and indispensable to summer travelers and boarders disposed to troublesome attacks of summer diseases.

A trio of works on teaching is before us. The first is a new edition of J. A. Fitch's lectures‡ on teaching, delivered before the Cambridge University in 1880. The work contains a veritable encyclopedia of information and counsel on every possible department of school work. More, it is nearly all practical. A work in a lighter vein, with far less practical points, but with much good philosophy, is the Rev. Edward Thring's "Theory and Practice of Teaching."§ The book is written in a pointed, entertaining style, and does not lack for ideas. The third, is the well known manual of Dr. Calderwood.¶ This earnest, thoughtful volume deserves its third edition. Its chapter on self-government contains the very keynote to all successful teaching.

Rarely does anything, even from a well-known pen, sustain close scrutiny so well as Henry O. Forbes' Naturalist's Wanderings in the Eastern Archipelago.‡ From beginning to end the material is all fresh. Mr. Forbes' travels through Java, Sumatra, the Moluccas, Timor-Laut, Buru and the surrounding islands were over a path never before examined by a scientific traveler. He gave ample time to his task—over five years. He took accurate notes, and he has worked them up admirably. The scientific observations are of first importance. Beside the matter woven into the text each part has a full appendix containing classified lists of animals found, comparison of his work with that of other naturalists, and full notes of explanation. Mr. Forbes has a keen eye for picturesque sights, odd customs, and pleasant incidents, as well as an in-

sight into the practical affairs of the countries. This material he uses with excellent taste and in excellent English. It is a book of travels of a high order.

No artist has ever lived who was known so widely as Gustave Doré. This fact makes his biography an important matter. A discriminating life would be of great value as a public educator, but Blanche Roosevelt has failed to produce such*. She is an unbridled genius-worshiper. Doré had genius, consequently she adores him. She begins her work with a youthful prodigy, and ends with a deified hero. This method of writing has resulted in an intensely interesting book, but its judgments are worthless. She ran all over Paris to gather material. She haunted Doré's friends, examined his surroundings, went Doré-crazy, until her task was accomplished. The life overflows with anecdotes, pen pictures, and bits of conversation, but it is as extravagant, as lawless, as Doré himself. One thing she has done. She has produced a work without which no one can do, who wishes to estimate the man Doré.

"The Fitch Club"† tells the story of a band of children leagued together under the leadership of a good and noble man, from whom the club was named, for the purpose of making themselves as helpful as possible to others. The number of good deeds performed, and the amount of happiness given was utterly surprising to themselves when they came to count up. The work is a very interesting one; its style of writing straightforward, natural, and clear; and its moral tone high and strong, while there is an utter lack of the prosy, preaching style in which such lessons are too often given to children.

"On Both Sides"‡ is a story of society life on both sides of the Atlantic. The book sparkles with wit and Americanisms, and contains many laughable incidents. Every opportunity for a good "take off" is seized, and the weaknesses of human character well depicted. It is a very readable novel.

The volume of his collected religious poems, which Dr. Taylor has published, more firmly than ever establishes his enviable position in literature. To faithfully represent in verse of almost perfect rhythm, and majestic flow, the stern, exalted character of the prophet, Elijah,§ is to prove that in the writer's soul burns the true fire of poetry. The other poems in the book all reach the same degree of excellence.

*Hearing and How to Keep It. By Charles H. Burnett, M.D. Philadelphia: P. Blakiston, Son & Co. 1885. Price, 50 cents.

†Summer and Its Diseases. By James C. Wilson, M.D. Philadelphia: P. Blakiston, Son & Co. 1885. Price, 50 cents.

‡Lectures on Teaching. By J. G. Fitch, M.A. New edition. New York: Macmillan & Co. 1885. Price, \$1.00.

§Theory and Practice of Teaching. By Rev. Edward Thring, M.A. New and revised edition. Cambridge: At the University Press. 1885. Price, \$1.00.

¶On Teaching: Its End and Means. By Henry Calderwood, LL. D., F. R. S. E. Third edition. New York: Macmillan & Co. 1885. Price, 50 cents.

‡A Naturalist's Wanderings in the Eastern Archipelago. A narrative of Travel and Exploration from 1878 to 1883. By Henry O. Forbes, F.R.G.S. New York: Harper & Brothers, Franklin Square. 1885.

*Life and Reminiscences of Gustave Doré. By Blanche Roosevelt. New York: Cassell & Co. 1885.

†The Fitch Club. By Jak. New York: Thomas Y. Crowell & Co.

‡On Both Sides. By Frances Courtenay Baylor. Philadelphia: J. B. Lippincott Company. 1886. Price, \$1 25.

§Elijah the Reformer. By George Lansing Taylor, D.D. New York: Phillips & Hunt. 1885.

THE CHAUTAUQUA MOVEMENT.

IN THE CHAUTAUQUAN for October we gave a full account of the inauguration at Chautauqua in August of the generous scheme of Chancellor Vincent to raise money for the Chautauqua chime by means of his new book, The Chautauqua Movement. Now we would urge the members of the C. L. S. C. to come to the support of the undertaking. Already the various classes of the C. L. S. C. have pledged themselves to take a sufficient number of copies to purchase the bells of the chime. But their work is not accomplished. The necessary number of actual subscribers has not been secured. Their pledge still remains unfulfilled. The time for energetic pushing of the work of getting subscriptions is now. The new book is to appear on February 1, and it is a compliment due to Chancellor Vincent that the appearance of his book be greeted by a subscription list such as will at once secure the chime to Chautauqua. Every member of the C. L. S. C. can certainly do something towards enlarging the list. The scope of the

book is such as to make it desirable for each member of the C. L. S. C. to own a copy. It is a book that will do more than anything else could do to enlarge the circle of Chautauqua readers. Interest yourself in this plan. Press the work.

The plan of sending in subscriptions is very simple. On a blank such as can be obtained by sending to Plainfield, N. J., write the number of copies you will take, and forward to Chancellor Vincent. If a member of the C. L. S. C., state to what class you belong.

When the book is completed notice will be sent to each person who has pledged himself to take copies, and the money can be forwarded. There is no doubt but that the forthcoming book will have a large sale among the members of the C. L. S. C., but for the sake of spreading the work let members of the organization see to it that it has a large sale beyond, and let the work begin now.

THE CHAUTAUQUAN.

We would call the attention of our readers to the continued improvement in THE CHAUTAUQUAN. The elaborate list of articles, with special departments and editorial matter, surpasses, we feel confident, both in quality and quantity, any other magazine of the price in either this country or Europe. In our next number we expect to have a new typographical dress. With

each number new contributors will appear, while in our special features, as the Local Circles, Editor's Note-Book, Editor's Outlook, Talk about Books, and the like, the improvement will be constant. All subscriptions to THE CHAUTAUQUAN should be sent to Dr. T. L. Flood, Meadville, Pa. Subscription price—\$1.50. In clubs of five or more, to one address, \$1.35 each.